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LECTURES

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BY

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Paraplegia affecting the upper extremities: its comparative rarity. Paralysis from caries of the spine. Diagnosis, and resulting differences of treatment. Paralysis from inflammation of the spinal cord. Influence of mercury and zinc. Hysteric paralysis. Palsy of particular nerves. Other kinds of partial paralysis.

GENTLEMEN,—In my last lecture I described a class of paraplegic cases in many of which the paralysis affects the lower limbs first, then creeps upwards and attacks the upper limbs, the brain ultimately becoming affected. It is not, however, a matter of course that the paraplegia should begin in the lower limbs; it may commence in the upper limbs. It may be the result of disease affecting the upper portion of the spinal cord, that disease being either inflammatory or chronic—an alteration of structure, in fact; there being the same differences here as when paralysis affects the lower part of the spinal cord.

There is on the table a preparation taken from the body of a gentleman whose case I will mention. He was a young man of irregular habits, drinking a large quantity of wine, and a good deal exposed to wet and cold in hunting. From this exposure to cold and wet he had a severe pain in the neck, which was supposed to be of a rheumatic character. He neglected it, went hunting, and drank wine as usual. In spite of this neglect the pain subsided, and he thought that the disease was gone. But about three months afterwards he became paralytic in one arm, and then in the other. The muscles were not all paralysed, for with one hand he could take hold of the other, and lift it out of its place; but after a time the arms became completely paralytic. He now came to London and placed himself under my care. There was tenderness of the neck, there appeared to be some enlargement of its posterior part, and by and by one lower limb became paralytic, and then the other. He subsequently became comatose, lay in that state some days, and then died. On examining the body after death we found the original disease to be that which you now see on the table. A tumour was inside of the theca vertebralis, but outside of the dura mater. There was a deposit of lymph, of considerable thickness, which had become organised, extending from the great occipital foramen down to about the fourth cervical vertebra, but it was not quite sufficient to press on the cervical portion of the spinal cord. Outside of the spine there was a quantity of coagulated lymph—a large mass along part of the bodies and sides of the vertebræ, and this communicated with lymph inside by processes of lymph extending through the openings by which the nerves passed out to form the cervical plexus. The immediate cause of death was effusion of fluid into the ventricles of the brain, that circumstance occurring in this case which I mentioned in the last lecture. The malady went on till the ventricles were attacked, and then the fatal disease was superadded to the original affection. There was no disease in any part of the spine below that I have mentioned.

In this case the upper limbs became paralytic first, and the lower afterwards, and that is the usual course where there is disease affecting the upper portion of the spinal cord. It is the case in lisease of the vertebræ, as I shall mention presently.

A lady came to London some years ago to consult Sir H. Halford and myself. She had become paralytic in the upper limbs, but that was all. She could walk about and do everything but use her upper limbs; and in these one muscle had given way after another till the paralysis was complete. She then began to experience considerable difficulty in swallowing, showing that the disease was not under the control of medical treatment, and we advised her to return to the country. She went, and there she died. I am not certain whether or not she became

paralytic in her lower limbs; but her surgeon in the country examined the body after death and sent the result. The disease was confined to the cervical portion of the spinal cord, and from ramollissement, similar to that which I described as taking place in the lower part of the cord, it was reduced to the consistency of cream.

Cases of paraplegia affecting the upper are not nearly so common as those affecting the lower limbs; but we see them every now and then. The opportunities of post-mortem examination, of course, are rare, but I have conducted two, and from these I should conclude that the seat of disease is generally to be found in the cervical portion of the spinal cord.

Caries of the spine produces paralysis of the parts below, as you are well aware, and so far there is a resemblance between the symptoms produced by caries of the spine and those diseases of the spinal cord to which I have adverted in this and the preceding lecture. Owing to this similarity between the symptoms of the two diseases, cases of paraplegia are continually supposed to be cases of diseased spine. This, however, is a great error, because the treatment proper in the one case is quite improper in the other. Where there is caries, it is necessary that the patient should remain a year or two in a recumbent posture, but that is not requisite in cases of disease of the spinal cord, and probably is sometimes injurious. In many cases of caries it is right to make caustic issues, apply setons to the back, and adopt counter-irritation; but, where there is disease of the spinal marrow, if these remedies are not useless, yet they torment the patient, make a great demand on his bodily powers, and besides exhausting his strength are sometimes absolutely injurious. Over and over again have I seen cases of paraplegia depending on disease of the spinal cord treated with caustic issues, seton, and blisters, but without being productive of the smallest benefit; on the contrary, they are generally prejudicial, independently of which they make the patient miserable.

But how are we to distinguish cases of caries of the vertebræ from cases of paraplegia depending on disease of the spinal marrow? In the former there is generally pain in that part of the spine that is affected. There is one kind of caries, which I call rheumatic caries of the spine, in which the pain is very severe, and in which pain is produced by percussion on the spine; even in cases of scrofulous caries there is generally some pain in the part affected, and some pain on percussion, but it is not constant; and there are many cases of scrofulous caries in which this diagnostic symptom (pain) is absolutely wanting. This circumstance will help you in the diagnosis to a certain extent, but it is not of itself sufficient. If there be great pain in one part of the spine, and pain on percussion, you may be pretty sure that it is not disease of the spinal cord. I speak of pain that is indubitable, not imaginary pain. It is easy so to squeeze the processes of the vertebræ that the patient says it gives him pain. Still the absence of pain does not prove that the disease is not in the vertebræ, because in cases of scrofulous disease sometimes there is no pain. Paralysis, however, in cases of disease of the vertebræ, does not take place at an early period; it rarely occurs before there is angular curvature of the spine, and sometimes curvature to a considerable extent. That is a very important diagnostic mark. In cases of disease of the spine there is generally cramp in the lower limbs, and the posture of the patient is of a peculiar nature. The flexor muscles generally act, draw up the thighs and bend the legs, and you will find the patient getting into that position, with his knees drawn up towards the chest. By combining these diagnostic marks with each other you may generally make out whether the disease is within the theca vertebralis or external to it.

I now come to make some observations on the treatment of these cases, but it is rather difficult to lay down any clear rules for your guidance; that is, the treatment ought to differ according to the nature of the disease, but we have not yet sufficiently advanced in our knowledge of this complaint to be able to state positively whether the disease be of one kind or another. If the disease be an inflammatory affection of the membranes you may distinguish it tolerably well; but if it be of a chronic character it is difficult to discriminate between softening of the spinal marrow, tubercles in the spinal cord, and effusion of fluid into the theca vertebralis. I really am not able at present to tell you how to distinguish one of these diseases from the other in the living person, besides which the three may be combined together, or there may be one first, and the others may supervene.

However, let us suppose that there is a case, such as I have just described, of inflammation of the membranes of the spinal marrow. The patient comes to you with a severe attack of dreadful lumbago, and by and by he states that there is numbness in the legs, and then difficulty in moving them. In this case you may be pretty sure that there is inflammation of the membranes of the lower part of the cervical cord. How is that to be treated? In the first place take blood by cupping from the loins, and repeat it according to circumstances. Begin by purging the patient, clearing the bowels well out—a right plan to pursue in all cases of inflammatory disease. Then put the patient under the influence of mercury, exhibit calomel and opium, and treat him as you would a patient labouring under pleuritis or iritis. If I am not much mistaken I have several

times seen the disease stopped by the exhibition of mercury. I have known a patient labouring under numbness of the limbs and incipient paralysis recover when the gums were made sore by mercury. But if you are called in at a late period, when the inflammation has subsided, and the paralysis consequent on it remains, even then you cannot do better than put the patient under a course of mercury, though not such a course as you would employ in the beginning of the disease. You must not now exhibit two or three grains two or three times a-day, but a mere alterative course—five grains of Plummer's pill, night and morning—the eighth of a grain of bichloride of mercury twice a-day, in addition to which you may apply blisters to the lower part of the back.

The result will vary in different cases according to the time at which the treatment is commenced, or according to the intensity of the disease. In some cases you may obtain a perfect cure under the use of mercury; in others, an imperfect one. A gentleman riding in a second-class railroad-carriage was exposed to a draft of cold north-easterly wind from one to two hours. The next day there was pain in the neck, and two or three days afterwards his hands were benumbed. In the course of a week both his arms became paralytic, and then the lower limbs also. We put him under a course of mercury, and he partially recovered, so that he was able to walk about and write, but he was still paralytic to a certain extent.

The treatment of a chronic affection of the spinal cord producing paralysis, must be, to great extent, empirical, because you cannot make a certain diagnosis. Let me repeat what I have just now observed, that I have never seen any beneficial results arise from the use of counter-irritation; on the contrary, I have often seen it productive of mischief. Probably the bowels are very torpid, —they will require to be kept open, and it is very difficult to effect it. Sometimes very strong aperients are necessary for this purpose; but it is essential that they should be kept open, for the secretions of the digestive organs are very often exceedingly disordered. The stools will be black, like tar, and the lodgment of the black secretion in the intestinal canal appears to be productive of great mischief to the system. Calomel and a black draught may be exhibited every now and then, but a patient cannot take them from day to day. Sometimes the comp. ext. colocynth will be sufficient, but simple purgatives often fail. The pills which I am about to mention I have found to be convenient in cases of this kind. Two scruples and a half of comp. ext. colocynth; half a scruple of soap; one drop of croton oil. Let these be well rubbed up and carefully mixed, and divided into a dozen pills, one or two of which may be taken every night or every other night when wanted. These are excellent pills; they cause nothing like the inconvenience produced by large doses of croton oil, and are very efficient indeed. The disease is very probably quite incurable, and it does not matter what medicine you give the patient. But still every now and then the progress of the disease is stopped, and the patient gets very well again.

The treatment which I have found to be most successful, and under which I have seen the greatest benefit arise is, a grain of zinc made into a pill and given three times a day, and then a draught of twenty minims of tincture of cantharides to wash it down. If you dissolve the sulphate of zinc in the draught it makes it nauseous,—you may as well give ink. After a time the sulphate of zinc may be increased, and if you please you may carry it up to five or six grains; but I do not advise you to do it, for if you increase it to a certain point it makes the patient sick, and you cannot induce him to take it afterwards. It is from the continued use of the zinc, and not from the exhibition of large quantities that benefit is to be derived. The zinc may be increased to a grain and a half, and the dose of tincture of cantharides may be also increased, but I do not advise you to go beyond what I have stated of the latter; for if you do it is very apt to irritate the urinary organs. The tincture of cantharides is a diuretic, and some have supposed that it does the most good when it acts as such; probably that may be the case, but it seems to be a stimulus to the nervous system also. I mentioned a case in the last lecture in which a gentleman became paralytic in the lower limbs from inflammation of the lower part of the spinal marrow, induced by a local disease arising from the tincture of cantharides swallowed by mistake. It is easy to suppose that large doses of this agent may excite the vessels of the spinal cord so as to produce inflammation, and that very small doses may be a grateful stimulus to it, tending to restore its power in cases of paralysis. The best recoveries that I have seen have been under this treatment. Some patients have appeared to get very well again; in others the disease appears to have been suspended,—it has made no further progress. I see a gentleman every now and then who laboured under paraplegia, and in whom this treatment was employed. He is now able to walk about, though his limbs are still weak; he has been neither better nor worse for some years. In other cases I have thought that benefit has arisen from the long-continued use of very small doses of bichloride of mercury combined with tincture of cantharides. Small doses do not seem to act as mercury on the system. I apprehend it acts much in the same way as the sulphate of zinc. Exhibit the sixteenth of a grain of bichloride of mercury in a certain quantity of tincture of cantharides, in a draught three

times daily, and such plan of treatment will sometimes be useful. But it is right to state that in a great number of cases of chronic paraplegia the disease is incurable. The disease, however, may go on for years before it ascends to the brain and destroys life.

I have described to you paraplegic affections occurring in cases of hysteria. These instances are not very uncommon, but paralysis arising from hysteria is very different from that originating from organic disease or pressure on the spinal cord. In hysteria the evil is not that the muscles do not obey the will, but the will is not exercised. It is a remarkable circumstance that a woman will be paralytic, think that she cannot use her limbs, and yet on something exciting or agitating her she can walk very well; and sometimes what is supposed to be paralysis in hysterical women is altogether a cheat. A young lady was supposed to be paralytic in her lower limbs, but on some one going in to look at her they discovered her standing on a chair to reach down her bonnet. It is right that you should be aware of the tendency to practise deceit in all hysterical persons, and that you should make allowances for it; for it is a curious fact that some of those who are prone to deceive about their complaints turn out very well afterwards, and constitute some of the best members of society. One person will pretend to pass gravel which she has picked out of the earth; another will pretend to pass black urine which she made black by mixing ink with it; and another will pretend to be paralytic who is not paralytic at all. You should never expose these patients if you can avoid it, but try to get their attention directed to other things; for if you expose them, even to their own families, they will scarcely ever recover their character, whereas when the disposition to hysteria is removed many of them become excellent persons.

As this is not a systematic course of lectures, I am not particularly careful about the order in which I bring the subjects before you; and I shall conclude this lecture by adverting to some other cases of paralysis about which you will be consulted, of a different nature from those I have hitherto described. You will find a person paralytic on one side of the face, and nowhere else, and this may indicate some formidable disease, but that is not usually the case—there is no great mischief, and the patient gets well. The paralysis, if confined to one side of the face, does not excite any fear, as in the case of cerebral paralysis. It frequently arises from pressure or other injury affecting the portio dura. A person is exposed to a draft of cold air, and the next day one side of the face is paralysed, but it is unaccompanied with pain; the patient, however, becomes frightened, fancies that she is going to be paralytic, and her friends participate in the feeling. Let her be careful not to expose herself to the draft again, give her blue pill every night, an aperient every second or third day, let her live moderately, and in nine cases out of ten the muscles will begin to act, so that in two or three months she will be well. I cannot exactly say what is the pathology of such cases as I have just described. There is some deficiency in the nervous power; there may be inflammation of the neurilemma, or of the canal through which the nerve passes, but certainly there is no pain indicating its presence. There are, however, other cases in which there is clearly inflammation—inflammation of the petrous portion of the temporal bone. A gentleman was seized with terrible pain in the ear, it increased in severity, went to the head, became intolerable, keeping him awake at night, and making him almost delirious. One side of the face became paralytic, and he came to London just at that period. Dr. Chambers and myself were consulted on the case, and we concluded that there was inflammation of the petrous portion of the temporal bone extending from the tympanum. We cupped him again and again, put him under mercury, and made the gums sore. The pain then relaxed, the paralysis was gradually removed, and he got well. I saw him lately, and found him using one side of the face as well as the other. I believe that in these cases inflammation of the tympanum takes place first, and that it extends thence to the bones in the neighbourhood.

The treatment to be employed is that which I have just mentioned, and it almost invariably succeeds; namely, taking away blood, purging the patient, and making the gums sore with calomel and opium.

Partial paralytic affections may take place anywhere. A dropping of the eyelid—ptosis, from paralysis of the levator muscle—is not very uncommon. Occasionally it depends on something in the state of the system, apparently without organic disease, causing an insufficient supply of nervous energy to the muscle. It may be relieved in some instances by a course of blue pill, occasional purgatives, and so on; but where it has existed for a long time, and these simple rules have failed in removing it, according to my experience it has originated in disease within the cranium, and you may expect to find deposit on the nerve there, or disease in that part of the brain from which the nerve arises. A gentleman had tic douloureux of the face, he then had epileptic attacks and ptosis of one eyelid; the eyelid completely dropped. The body was examined after death, and we found the base of the brain—the cerebrum—in a state of ramollissement to a considerable extent. All that part of the brain from which the nerves had originated was in a state of softening, and this accounted at once for the epilepsy,

the tic douloureux, and the ptosis. Paralysis of the upper eyelid after an injury is not of serious consequence; it may arise from an extravasation of blood pressing upon the nerve, and that may be absorbed; but it is a very bad symptom when it follows inflammatory disease of the brain; for it is then generally the result of a deposit of lymph, or probably of matter, at the part whence the third pair of nerves has its origin.

It is not unusual to find partial paralytic affections in the lower limbs. A patient is exposed to cold, and then finds that he is unable to walk. On examination you discover that a part of the leg is numbed, and some of the muscles, but not all, are paralytic. Put him on a course of blue pill, combine with it the use of some liniment, and he gets well. It is an affection of a nerve itself, not of nervous centres.

You will be consulted about children who are paralytic. There is a peculiar paralytic affection of the limbs that occurs in children who are very young. The child generally has a fit at the time which has terminated in water in the brain, and some time afterwards one or more limbs become paralytic, or one set of muscles in a limb and not the other. In some cases the muscles at the back part of the leg become affected, the heel is drawn up, and the child grows up with contraction of the foot. It is necessary at some time or other to divide the tendon and relieve the contraction. Sometimes all the muscles of the lower limb become paralytic, and in other cases there is paralysis in one arm. I know a gentleman who, when he was an infant, had some affection of the brain, in consequence of which one arm became paralytic, and has continued so through life. Partial paralysis is often the cause of squinting; some of the muscles over the eyes become paralysed, and not the others.

I saw a child with a very singular paralysis of the following kind:—It seemed that the pharynx was paralysed, or some of the muscles external to it which are necessary to deglutition, for it was with the greatest difficulty that he could swallow. It was evidently a paralytic affection which had come on suddenly without inflammatory symptoms. I never heard the result, but I suppose that the child must have died from starvation. It could scarcely take sufficient food to enable it to grow up. I really do not know what is the change produced in the brain in these cases. It does not appear to be of any great extent, and does not extend afterwards.

I need not state that every part of the body is represented in the brain. As the mandates of the will go from the brain to every muscle, so from every part of the body sensations are communicated to the brain, and injury to that part of the brain which belongs to a particular muscle may produce paralysis. The paralysis having once taken place it seems to go no further. It does not destroy life; but in most cases, being once established, it remains through life. The patient is never very well; he may, however, live to be old, and if you examine the brain you find nothing at all to account for the symptoms.

A paralysed limb does not grow like the other limb, and this is a source of great inconvenience in the lower limbs. As the child grows up, one leg is shorter than the other; some of the muscles may act and some not, but the whole of the limb suffers, and the patient is under the necessity of having a shoe with a thick sole to enable him to walk better.

If you are consulted on one of these cases in the very first instance, I believe that you may do good by putting the patient under the influence of mercury. Even within the first two or three months it is well to try the effect of mercury on what I call, in order to distinguish it, "infantile paralysis;" but after that, I do not think that it is worth while to have recourse to remedial measures. I have tried all sorts of remedies, and I have seen them resorted to by others, but I never saw any good arise from them. The best thing you can do for a patient growing up with paralysis in the lower limb is, to consider whether any mechanical contrivance can be made use of to take the place of the paralysed muscles, and enable the child to walk about better than he would otherwise be able to move.

THE VAGUS NERVE THE MOTOR OF THE STOMACH.—Longet experimented on dogs. He irritated the vagus nerve by galvanism, or mechanically, and found that contractions of the stomach followed, which constricted itself into two portions, a cardiac and pyloric, and aliment was forced through the pylorus. The organ was most susceptible of such stimulus and movement during digestion. Irritants applied to the semilunar ganglion or splanchnic nerves produced little, if any, movement of the muscular fibres of the stomach.—*Annales Med. Psych.*

DURATION OF PHTHISIS.—Of 307 consumptive patients, in one the disease ran its *obrious* course to a fatal termination in 22 days, and in eighteen more within a period of from 24 to 84 days. Within three months 7 individuals died; within four months, 22; five months, 21; six ditto, 29; seven, 18; eight, 23; nine, 21; ten, 12; eleven, 11; and twelve, 13 more. Eighteen patients lived till about the end of the second year, and eleven till the end of the fourth. One lived for 10 years after the first appearance of decided symptoms of phthisis; two for 12 years; one for 14; and, lastly, one for 20 years after the same epoch.

ON

PERIODS OF YEARS,

BEING A SEVENTH CONTRIBUTION TO

PROLEPTICS.

By T. Laycock, M.D., Physician to the York Dispensary.

Time has always been measured by the motions of the sun, and moon, and stars. The apparent motion of the sun round the earth, or of the earth on its axis, has measured days; the revolutions of the moon round the earth marked weeks and months; and the motion of the earth round the sun determined the year and its seasonal divisions.

These are simple periods, and have been already noticed; but those comprising a lapse of years were measured by the motions of the sun, moon, and earth, in relation to the stars. The observations on which these divisions were founded constituted the basis of true astrology, or that old system of astronomical and meteorological proleptics of which a few mutilated fragments only remain. Up to a late period the solar cycle of 28 years, and the lunar, or Metonic, of 19, were much in use; and these multiplied with the indiction or arbitrary period of 15 years, gave Scaliger's Julian period of 7980 years. Among the ancient Chinese, Chaldeans, and Egyptians, all the great periods were natural astronomical cycles, and those of the two latter were divisible by the number 7; but this was proper to the periods, and not a forced harmony of numbers. Thus, the cynic cycle was the great Egyptian period of 700 years (7×10) in which the conjunctions and feriæ returned in the fixed Sothoic year of 365 days 6 hours; and it consisted of four common vague lunar periods of 175 each, this latter being obtained by multiplying the vague lunar cycle of 25 by the vague solar cycle of seven. This latter is the subbatical cycle of Moses, and, according to Dr. Nolan, is of antediluvian origin, and an adequate instrument for deciding contested points in chronology. The embolismal period of 1440 years originated, according to Mr. Cullimore (Trans. of the Royal Society of Literature), with the Chaldeans. It is the period during which the twelve months become intercalated in succession, and this period, with the addition of an unit, is divisible by 49 (7×7) without a remainder. Other cycles of immense extent were marked by the ancient astronomers. According to Mr. Cullimore, the Chaldeans represented the origin and destiny of the world as depending upon two grand astral conjunctions, on the occurrence of which in a peculiar season of the year and point of the heavens, it was fated to perish by a deluge or conflagration. In his "Analysis of the Egyptian Mythology," Dr. Prichard shows that these and similar views were not peculiar to the Chaldeans. They were known to the ancient Egyptians, Indians, Greeks, and Romans; they constituted the foundation of the old Runic Mythology, and are easily traced in the cosmogony of the Aztecs, or ancient Mexicans, who probably had them from China or India, by way of Tartary. Dr. Prichard says,—"The Egyptians represented the world, in some of their philosophical reveries, as subject to occasional destructions and renovations, which succeed each other at distant intervals in a perpetual vicissitude. At the end of each period, the whole assemblage of celestial phenomena, which are regarded as the influential causes of all changes in the sublunary world, being restored to the same initial order, and proceeding in the same catenation as before, the whole series of events that depend upon them follow in their former connection of place and time. The same individual men are doomed to be born again and perform the same actions as before, the same arts are to be invented, and the same cities built and destroyed."

"Alter erit tunc Tiphys, et altera quæ vehat Argo
Delectos heroas; erunt etiam altera bella;
Atque iterum ad Trojam magnus mittetur Achilles."
Virgil, Eclog. iv.

This annus magnus, or great cycle, was calculated at from 300,000 to 360,000 years. Speculations of this kind might be infinitely extended, because the universe is infinitely extended, and its innumerable parts subject to a simple, unchanging, universal law of motion. Just as each planet in our planetary system revolves round the sun, so may the sun and its subject planets revolve round another central sun, and so on, *ad infinitum*; for where shall we place the limits of the universe?

It is manifest that such cycles were matters of speculation, and their periods calculated by the ancient astronomers. Of course, the knowledge of these periods can have no practical application. The future of 360,000 years may well be left to take care of itself. There are minor periods, nevertheless, which fairly come within the scope of the physician and philosopher, and one or two of these I shall notice.

Periods of years may be determined in various ways. The science of astronomy, as we have just seen, marks them; and so, also, do changes in the electricity and magnetism of the earth and air. Thus, comets, earthquakes, meteors, violent thunder-storms, hurricanes, immense floods, thick fogs, great heat and cold, &c., may be instrumental in determining these periods. The latter phenomena may react upon animated nature, and induce famine, fatal and wide-spreading epidemics, the sudden migration or extraordinary multiplication or mortality of animals, as locusts, mice, &c. Famine and pestilence may react upon society at large, and lead to civil strife, revolutions, wars, and the migrations of

nations. Now, all these have been recorded to recur periodically in two ways; first, they have been popularly classed together as cause and effect in all ages; and, secondly, they have been classed together by astrologists as the effect of sidereal influence. A remarkable illustration of the latter kind occurred to me lately. A believer in astrology, having read my first essay of the present series in which I applied the term "quackery" to the practices of astrologers, nativity-casters, &c., wrote me, on September 17th last, a letter on the subject, taking me to task for applying so improper a term to his favourite pursuit. "Before I conclude, however," he observes, "I will just make one prediction, in order that you may see that astrology is not 'quackery.' On the 17th day of October, in this present year, the planets Saturn and Mars will be in conjunction, and both in square to Venus. Now, these aspects were never known to occur without producing a dreadful storm of wind and rain, and which was followed some little time after by a ravaging fever, or other mortality. . . . Expect, then, on the 17th of October next, a *severe storm*, which will cause great floods, much destruction to shipping, &c. As the aspects continue for some days, the storm may begin a day or two before the 17th October, and continue a little while after. In the latter end of this year a fever, or other contagious disease, will ravage many parts of England, and which will be more fatal than has been known for many years. These aspects never occur without being followed by a great mortality." This connects great atmospheric variation with epidemic influences, and it is but justice to my anonymous correspondent, who signs himself, "A Friend," to say that his prediction about the storm was verified to the letter as regards England; in the United States and Canada it occurred on the 26th October. The coincidence is worthy investigation, and the more so as the same storm was predicted by other astrologers long before it occurred;* and although there is no *proof* that astral influence effected the atmospheric derangement, we can fairly suppose that the planets in their movements may perform the office of pointers on the face of the great celestial clock, and indicate the times of telluric changes. Their movements may not be the cause, *but they may be isochronous with the cause.*

Medical writers, following Hippocrates, have generally connected the unusual prevalence of epidemics with a peculiar constitution of the atmosphere, but without any special reference to the cause of that peculiar constitution. Numerous writers on epidemics in general, and in monographs, as on the cholera, influenza, &c., have, however, attempted to trace a connection between earthquakes and volcanic eruptions and epidemic diseases. The facts are too numerous, and the literature is too extensive, to be collated here, but the English reader will find much information on the subject in a series of articles published by the Rev. W. B. Clarke, in vols. vi., vii., and viii. of the "Magazine of Natural History" (On certain Recent Phenomena, Vicissitudes in the Seasons, and Prevalent Disorders Contemporaneous and in supposed Connection with Volcanic Emanations), and which contain an account of most of the telluric and atmospheric changes up to 1833, detailed by Hecker, Schön, Geigel, and others, as accompanying the cholera in its progress through the world. Mr. Clarke thinks it quite certain that there is a positive periodicity in the derangement of the earth and atmosphere. So far as regards the measure of the periods of recurrence, he concludes, from the numerous facts he has collected, "that there is an extraordinary concurrence in all cases of *great* terrestrial and atmospheric derangement with the multiples of a period of 16 or 17 years (the sum of whose digits is 33), and which periods, calculated backwards, from the year 1833, will be found, with fixed allowance, occasionally, of from 5 to 6 years, to comprehend almost every phenomenon of the kind on record." Mr. Clarke illustrates this law by a reference to numerous ancient and modern dates of earthquakes, famine, and pestilence, the extraordinary irruptions of mice and of locusts, aphides, and other insects, and leaves no doubt on the mind of his reader as to the truth of his views in general. But for want of a clear method his numerous facts are not so convincing as they ought to be; there is too little precision in the dates, and a too evident wish to accommodate the latter to theory: they want, too, a comparison and connection with astronomical phenomena. Mr. Howard's known cycle of 18 years is much more clearly demonstrated. Mr. Clarke would do well if he were to re-arrange his facts with reference to it. For example, according to Mr. Clarke, the years 1347-8 and 1833 are two epochs, both remarkably distinguished for earthquakes, meteors, and other meterological phenomena, for a widely-spread and devastating pestilence, and for extraordinary changes in animated nature; now, the interval between these two epochs comprises exactly 27 of Mr. Howard's lunar cycles. Mr. Howard digested the barometrical observations made at the apartments of the Royal Society, and found that the barometric

* As my anonymous "friend" *asserts* that this conjunction was never known to occur without being followed by the results described, perhaps he will favour me (*in proof of his assertion*) with the dates of previous conjunctions, and their consequences, drawn up in a tabular form. And this he ought to be able to do, having, as he says, devoted many years to the study of astrology.

mean is depressed, on an average of years, by the moon's position in south declination. This depression is gradual, and commences with the moon in full north declination. The effects of this influence pass through a cycle of 18 years. The mean weight of the atmosphere increases through the fore part of this period, and having kept for a year at the maximum thus obtained, decreases through the remaining years to a minimum, about which there is some fluctuation before the mean begins to rise again. (Phil. Trans., 1841, p. 280.) If allowance be made for the 2 years of stationary maximum and uncertain minimum, this cycle is so strikingly corroborative of the views of Mr. Clarke that the coincidence cannot be considered accidental. The revolution of the lunar nodes and apogee takes place within this cycle of 18 years, and Toaldo thought the half of it, or nine years, would explain the recurrence of plagues, epidemics, &c. There are isolated facts which certainly point to a cycle of 17 or 18 years. Locusts are said to appear in America every 17 years,—so, also, the cicada septemdecem punctata in England. (Fam. Lib., vol. li.) The small-pox observes a similar cycle in New Spain. "Small-pox," writes Humboldt and Bonpland, "introduced in 1520, commits its ravages only every17 or 18 years. In equinoctial countries it seems to have regular periods of recurrence, like the black vomit, and several other diseases; for, although frequently introduced by shipping from Europe, it does not become epidemic but at well-marked intervals," &c.

The facts and inferences just stated leave little doubt that this lunar cycle is one of the periods to be observed. The moon, as I have already shown, has an influence on the earth's atmosphere, and through this influence will, undoubtedly, give a character to its medical constitution. The influence of the sun on the earth's magnetic and electric tension ought not, however, to be forgotten; for it is in this direction we must look for the exciting cause of volcanic eruptions, earthquakes, meteors, hurricanes, &c., and through these for the remote cause of widely-spreading and destructive pestilences, occurring at longer periods. The prevalence of an epidemic will, also, be limited or not, according to the number of a population which it can influence. It has been observed, for example, that scarlatina prevails every 3 or 4 years only, because one attack is prophylactic against a second, so that another growth of children must rise up after it has once prevailed extensively, before it can reappear. So, also, the minor lunar periods, and those of a larger cycle, may operate on human affairs. Mr. Alison observes that the ravages of the Tartars in India and Persia have occurred at nearly equally distant periods in all ages, from the earliest history of the world. (Principles of Population, vol. i., p. 401.) It is manifest that famine and pestilence might be the immediate determinators of these periods, the famine and pestilence being induced by telluric mutations, and the latter by periodic sol-lunar influences. But in tracing the true laws of periodicity, how many complexities are to be unravelled, how many causes of error to be avoided!

And yet such is the multitude of observers, and the increased powers of observation afforded by modern science, that there seems every reason to hope that the laws of recurrence of natural phenomena will ultimately be clearly developed. In this case, as in others which I have discussed, the abandonment of vague generalisations, and the adoption of a maintained, systematic, and well-digested series of observations, are alone necessary to attain the desired end. Manifestly, the mortuary registers present the means of determining the cycles of epidemics, in England at least. The periodic migration, or extraordinary appearance at intervals of years of animals, especially of fishes and insects, must be carefully noted in detail. Agriculture, astronomy, meteorology, geology, and terrestrial magnetism, must supply their quotas of observations; and an induction, with special reference to latitude, the longitude, and the magnetic meridians, must be made from time to time from the whole series. There cannot be a doubt that in a few years such a clue would be obtained by this plan as would render subsequent researches comparatively easy and certain.

York, Dec, 15, 1843.

CASE OF

COMPLICATED INTUSSUSCEPTION IN AN INFANT.

By Henry Taylor, Esq., Surgeon, Guildford.

To the Editor of The Lancet.

Sir,—The following case was attended with such marked symptoms during life, and presented appearances after death so unequivocal, that I think it will be deemed interesting by the readers of The Lancet:—

The subject of it was a fine-grown male infant, aged twenty months, previously healthy from his birth. Nov. 17th, at eleven, a.m., the child was seized with a sudden pain the in belly, which became so severe as to induce convulsions. When I visited him, two or three hours later, he was still writhing about in evident pain; and although in a state of consciousness, he seemed quite indifferent to objects about him, and lay with the eyes half closed. There was no tenderness nor tumour to be discovered in any part of the abdomen, the pulse was not excited, and the skin was quite natural. The bowels

had been relieved the same morning, and he had been making no unusual exertion. Suspecting that the symptoms might arise from undigested food in the stomach or bowels, I gave an emetic, followed by a calomel aperient. In the evening I found him in the same state; there had been free vomiting, but no evacuation from the bowels. The warm bath was now used, and a domestic enema given; this procured a scanty motion, and the purgative was therefore repeated.

18. The child is not better; but the paroxysms of pain seem less severe, and return at longer intervals. Vomiting supervenes soon after food or medicine is given, and there is still constipation. Stronger purgatives were tried, and enemata of castor-oil and infusion of senna were administered, but were returned in half an hour afterwards. In the evening I made another examination of the belly, and an indistinct tumour could be made out in the right iliac fossa, but there was still no tenderness nor distention of the abdomen. Fearing that there might be invagination of the bowel, I intimated to the mother the probable termination of the case.

19. He is now much exhausted with suffering and want of sleep, and lies in a kind of stupor, unless roused. The vomiting is more speedily induced by swallowing food, &c., and there is an excessive admixture of bile with the rejected matters. There is constant thirst, and but little urine is passed. The tumour in the abdomen is now well defined and becoming hard, but is not painful on pressure. I made an attempt at reduction of the bowel by injecting large quantities of warm water into the colon; but as soon as three parts of a pint had been thrown up, the water regurgitated in spite of all efforts to prevent it. Small doses of ammonia and opium were now given to support the little patient, who was evidently sinking.

20. The case is now quite hopeless; there is constant vomiting; the bilious matters have a decidedly fæcal smell, and nothing but flatus passes per anum. The child appears to be asleep, the extremities cold, pulse hardly perceptible, and breathing hurried. The belly is not at all tympanitic. The child died at 11, p.m.

Autopsy, Thirty-six Hours after Death.

The *abdomen*, already much discoloured, had a flattened appearance. Its cavity being laid open, the omentum was observed to be very scanty; the portion of ileum exposed was moderately distended with air, but its convolutions appeared to be very few. On tracing it from its commencement toward the cæcum, I found extensive invagination of its lower portion, which had a knotted and twisted appearance, at first sight quite inextricable. The bowel having been included in ligatures, the parts were removed, and the following displacement was made out:—The termination of the ileum, to the extent of six or seven inches, the cæcum, and ascending colon, were filled with inverted bowel. The portion of ileum above mentioned was puckered up so as to form a mass scarcely an inch in length, and of a dark chocolate colour; and this was now seen to have formed a second invagination into the cæcum to the extent of two inches. (It would appear as if the further descent of bowel had been checked by the unyielding nature of the mesentery, or, rather, of the mesenteric vessels, and the continuance of peristaltic action had caused the double invagination.) The colon beyond this was much contracted, but otherwise healthy. On laying open the including parts, the bowel within was found in a state of gangrene. There were no adhesions, nor any signs of inflammation in the adjoining parts.

The *thorax* was opened; the lungs were found healthy. There was considerable hypertrophy of the heart, the wall of the left ventricle being half an inch thick. In the right ventricle was a large mass of soft, pale-coloured lymph adherent to the lining membrane, which, however, was of healthy appearance underneath.

In conclusion I may remark that this case is in one respect peculiar, namely, in the absence of certain symptoms laid down by systematic writers as diagnostic of this accident. Here was no tenesmus, nor any discharge of bloody mucus from the bowels; neither was there any distention of the abdomen or other sign of consecutive enteritis; on the contrary, there was some sinking of its parietes, with a retracted navel. These differences are probably to be ascribed to the age of the subject. Again, the formation of an elongated tumour was slow and progressive, instead of occurring suddenly; and this circumstance might serve to distinguish the case from one caused by fæcal accumulations.

In regard to the treatment pursued, I may observe that it did not seem to be of the least avail. Indeed, it is impossible to regard such a specimen of intussusception as the one now before me without being struck with the futility of all attempts to unfold it by any distention, however powerful, of the lower part of the canal. The great length of bowel included, and the contorted state into which it is thrown by the resistance of the mesentery, appear to be insuperable obstacles to its return; while distention of the colon, whether by air or fluid injections, must tighten the cæcal valves, and so add to the difficulty. The only suggestion I have to offer is, to endeavour to suspend the peristaltic action at the first invasion by a full dose of opium, and in the case of adults by the tobacco enema in addition, while the use of purgatives should be carefully abstained from. In this way spontaneous recovery would, at least, not be frustrated.

I am aware that there are many difficulties in the way of surgical interference, but it is the only means by which reduction could be effected in confirmed cases. The abdominal incisions would not be greater than those required for excision of ovarian tumour, and manipulations as severe are often practised in operations on voluminous herniæ.

Guildford, Dec. 18, 1843.

INTERESTING CASES OF FOREIGN BODIES IN THE EYE.

BY

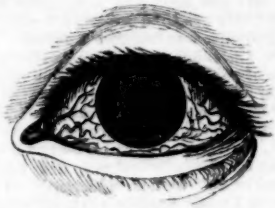
WILLIAM WHITE COOPER, Esq., Senior Surgeon to the North London Ophthalmic Institution, &c.

As the treatment of cases in which foreign bodies have pierced through the cornea, and penetrated the anterior chamber of the eye, is of importance, I send for publication in THE LANCET the particulars of one which has recently fallen under my observation.

CASE 1.—William Dick, aged twenty-three, applied to me on the 18th of last August. He was a turner by trade, and about two hours before I saw him was engaged in working some brass in a lathe, when a particle flew off and struck his left eye. The pain at the moment was not very acute, and having washed the eye with warm water he resumed his work; but he was speedily obliged to desist, from the severity of the pain which came on. He then applied to me.

Upon examining the eye I found that there was already great congestion of the conjunctival and sclerotic tunics, and, directing my attention to the cornea, I at once observed a bright metallic particle lying at the bottom of the anterior chamber, towards its outer part; a little higher, a wound in the cornea indicated where it had penetrated. The patient complained of much intolerance of light and intense pain, not only in the eye itself, but extending to the brow, temple, and side of the nose. From the severity with which inflammation was evidently setting in I felt the importance of removing the particle at all hazards, and proceeded as follows:—

Having separated the lids and fixed the eye with the fingers of one hand, I made an incision obliquely downwards and outwards, through the lower portion of the cornea, and then cautiously introducing the fine hook occasionally used for extracting the cataract, I gently picked out the particle, which was a minute scale or chip of brass, flattened, and of the circumference of a small pin's-head. Having removed it I applied belladonna to the brow, bound up the eye, had the patient cupped from the nape of the neck to six ounces, gave him active aperient medicine, placed him upon low diet, and enjoined perfect quietude. My instructions were attended to, and I had the gratification of finding that the inflammatory symptoms speedily subsided. The patient, indeed, did so well that the section appeared firmly united on the third day, and at the expiration of a week he was discharged cured.



The particle of brass is lying at the bottom of the anterior chamber, and the black line marks the incision for its extraction.

I would impress upon the mind of every surgeon to whom such a case as the above might occur, and who may not be much in the habit of operating upon the eye, the immense importance of avoiding injury to the iris. That membrane will bear a considerable clean incision with impunity, as is constantly seen in the operation of extraction of the cataract, but it will not bear bruising or contusion. If such violence be applied, destructive inflammation is almost sure to follow. So sensible am I of this, that if, in making the first incision in the operation of extraction, the aqueous humour escapes (an accident which will now and then happen to the best operator), I prefer sending the patient to bed, and deferring the operation for a few days, to completing the section with the curved knife, for however carefully that may be used, violence to the iris can scarcely be avoided, and the risk of subsequent inflammation is thereby greatly increased.

In the "Medical Gazette" for October 8, 1841, I published some remarks upon the treatment of foreign bodies in the eye; and the following case will illustrate the importance of careful investigation whenever such an accident is suspected.

CASE 2.—A respectable tradesman applied at the North London Ophthalmic Institution on the 8th of July, 1843. He stated that five weeks previously, whilst walking in the street, he felt something "strike into his right eye," which caused acute pain. He immediately went to a surgeon in the neighbourhood, who examined the eye, but failed in detecting any foreign body. The patient was directed to foment the eye thoroughly with warm water, which was done; but no relief was afforded. Inflammation, with severe

pain, set in the same evening; leeches were applied; active purging was resorted to; but without alleviation of his sufferings. After two days' torture he consulted another surgeon, who was equally unsuccessful with the first in discovering any foreign body, but neither of these gentlemen could have everted the upper lid. The patient stated to me that he was confined to bed three weeks, and severely salivated; but although the acute symptoms subsided, motion of the eye caused severe pain.

When I saw him, five weeks after the accident, he was much debilitated, and his teeth were loosened by mercury. The conjunctiva of the eye was of a purplish hue; the cornea hazy towards its upper part; and many vessels ramified upon it; the iris dull and slightly discoloured; the vision imperfect.

The first thing that I did was to evert completely the upper lid, and there I found a particle, apparently of coal, quite as large as a small pin's-head, firmly adherent to the conjunctiva of the palpebra, and imbedded in a sort of fungous growth. I picked it out with a cataract-needle, and the poor fellow immediately experienced the greatest relief. He said he felt "comparatively in heaven." The exciting cause of irritation being removed, the eye rapidly got quite well.

This case should teach a lesson to every surgeon which ought never to be forgotten, and will, I hope, leave a deep impression upon the minds of all who read it,—it requires no comment from me.

Tenterden-street, Hanover-square,
Dec. 20, 1843.

DEATH AFTER SWALLOWING THE INFLAMMABLE TIPS OF LUCIFER MATCHES.

To the Editor of THE LANCET.

SIR,—I beg to forward to you, for insertion in THE LANCET, the subjoined case which has lately occurred in my practice, and which I consider valuable, not only from the fact that few, if any, similar cases have been recorded, but, also, from the anomalous symptoms that were observed during life, as well as from the very unusual appearances which were exhibited at the post-mortem examination. I remain, Sir, yours very obediently,

JAMES SHEPHARD.

Union-street, Stonehouse,
Dec. 15, 1843.

On Monday evening last a poor woman brought her child, aged two years and four months, to my house, informing me that on the previous Thursday, while kissing her child, she observed her breath to smell of lucifer matches. However, as the child was not at all unwell, she contented herself with mentioning her suspicion to her husband. The child continued well all day on Friday and Saturday. On Sunday, although she seemed poorly, she ate a hearty breakfast. The father this morning discovered eight lucifer matches with the ends bitten off. On Sunday evening the child was taken to chapel, though she appeared rather heavy and drowsy. On Monday she still appeared very unwell, but without any prominent symptoms. On being pressed she stated that she had sucked the lucifers. As she became worse towards the evening she was brought to me for advice. She was lying in her mother's arms, exhibiting a disinclination to move. She had a little feverish excitement, but there was a total absence of active symptoms. The bowels had been opened, but not purged; there had been no vomiting, no complaint of pain. I questioned the parents especially as to the probability of the child having on that day (Monday) sucked the matches, but they assured me that it was impossible the child could have obtained them since the Thursday. I recommended a little oil, and expressed my opinion that this was not a case of poisoning by phosphorus, and that the lucifer matches were not the cause of the illness. In about five hours from my first seeing the child I was called out of bed to attend her. She was violently convulsed, and altogether in a very alarming condition. I left with the conviction that the illness and convulsions were but coincidences. The child died about three hours after my visit, and an inquest was held on the body, when I informed the jury that although I could give no decided opinion on the case still I believed that the death was but a coincidence, and was not the result, of the taking phosphorus. The jury then adjourned to give me time to make the required examination, when, to my great surprise, I found the following appearances:—

On opening the stomach, about half a wineglassful of mucus, intermixed with blood, resembling coffee-grounds, escaped. The mucous membrane of the stomach was, generally, highly vascular, and there was an abnormal quantity of mucus secreted and attached to the mucous membaane. There was an irregularly-defined space, covering about two inches in extent, of a florid red colour, on the surface of which was a thick collection of mucus, intermixed with which was "coffee-ground" blood, presenting the appearance of having been simultaneously secreted. On holding the stomach to the light its vessels were seen to be generally much dilated. The most singular appearances were in the intestines. They were such as I can account for only on the supposition of powerful reversive action, but where were the symptoms during life? Throughout the small intestines I found ten invaginations, many of which included

from two to three inches of intestine, which was inflamed at the invaginated parts. None of these appeared to be strangulated. The bowels were, generally, empty. Two of these invaginations were found in the duodenum, the remaining number in the rest of the small intestines.

The verdict, which was arrived at, and in which I fully agreed, was, that the deceased died from the effects of lucifer matches. I consider that the phosphorus, which exists in them in a minutely divided state, had attached itself to the mucous membrane of the stomach, and excited inflammation of that organ by virtue of its chemical action.

REPLY OF MR. WAKEFIELD TO MR. ROTCH.

To the Editor of THE LANCET.

SIR,—My attention having been called to Mr. Rotch's statement in THE LANCET, of last week (page 354), I beg to offer some remarks upon the case, and to enter upon an explanation which I hope will prove satisfactory to the profession and relieve me from certain imputations which are quite unmerited, and display, on Mr. Rotch's side, a misapprehension of my behaviour, which, I must confess, has greatly surprised me. I enter upon my own justification only, leaving Dr. Hamilton Roe to conduct his own defence, if he thinks fit, at the same time premising that no misunderstanding exists between the Doctor and myself, and that no difference of opinion in the treatment of the case was at any time made manifest. One act of Mr. Rotch surprises me greatly. After castigating, in no measured terms, the editors of the "Provincial Medical Journal," for their indelicate introduction of his relative's name upon anonymous information, he shows a degree of delicacy in not disturbing the incognito of the correspondent signing himself "M.D.," which, to me, is unaccountable. I am most anxious to know how "M.D." became possessed of the facts, *the medical facts*, connected with this case. Who could have furnished the medical phraseology in which the history is clothed?

I now proceed to a narrative of the case as it occurred, and I hope my veracity, from the station I hold in the profession, will be fully relied upon.

On the 26th of June I was requested to see the highly respectable relative of Mr. Rotch. I had attended several branches of the family before, but she had never required my assistance, her general health and constitution, for the age of seventy-nine, being unusually good, and she always expressing herself as placing little faith in medicine. She had returned from Bath a few days before, having been suffering whilst there from the complaint I was called in to prescribe for, namely, bilious continued fever with distressing diarrhœa. The usual routine of medicine was prescribed, but without producing any impression upon the complaint, and on the third day, the family becoming alarmed, but without giving me any intimation of their intention, requested Dr. Hamilton Roe's attendance. He arrived in my absence, and finding that I had taken charge of the case, very properly refused to interfere in the treatment till we could meet in consultation. We met in the evening, and some alteration was made in the treatment, which was varied from time to time, the diarrhœa and fever receiving occasional checks, but never being subdued. We continued our attendance till Saturday, the 15th of July, the invalid having taken several drives in a carriage round the park during the preceding days. On this day Dr. Roe suggested the use of an opiate enema, which, however, did not arrest the diarrhœa, but produced considerable stupor, which increased on the two following days. No medicine of any kind was given after the 15th. Soda water and brandy, and nutritious broths, were the only things taken. On Monday evening the prostration of strength, accompanied with profuse perspiration and cold extremities, rendered the patient's case one of extreme danger.

It was on this occasion that Mr. Rotch, after asking Dr. Roe and myself whether more could be effected from medicine, received the reply, "*at present, certainly not.*" Upon hearing this opinion, he expressed his determination of resorting at once to the hydropathic treatment, first requesting that we should both remain upon the spot, lest any alarming consequences might result from so hazardous an experiment. Now comes the part of Mr. Rotch's narrative which has both surprised and mortified me, and which I as distinctly disclaim as he has emphatically asserted it. He says,

"With a due dread of the sneers of their brotherhood, both gentlemen refused to consent to anything of the kind, and it was with the greatest difficulty they were persuaded to remain in the house while the first application of the damp linen was made."

My consent was neither asked nor required. Why should it have been? When Mr. Rotch determined upon pursuing his own treatment, my answer, I remember perfectly well, was to this effect:—"I have no objection whatever to remain, but having no experience of the hydropathic treatment, I beg to relieve myself from all responsibility attending it." I remained in the house half an hour, witnessed the application of the damp linen, and saw the patient covered with blankets, felt her pulse, and, finding no change in her symptoms, left the house. We met again on the next morning, the symptoms remaining much the same. On the following day the diarrhœa and fever had subsided, to a certain extent, and a gradual

improvement continued until I took my leave, on the fifth day after the commencement of the treatment. The treatment, so far as I witnessed it, was similar to what is pursued in the gastric fever of children (but which I should not have ventured upon in so old a person)—bathing the body with cold water and giving small quantities of iced water as a drink. The bowels acting spontaneously, of course required not to be interfered with. I called several times afterwards; always heard a favorable report; and at the end of three weeks paid her a personal visit and found her comfortably seated in her rocking-chair.

This is the true history of the case in its material features. I fear not the sneers of my brotherhood when I say that many parts of the hydropathic treatment may be pursued with great advantage. Early rising, cold ablution, a substantial breakfast of excellent bread and butter, with new milk and new-laid eggs; after the repast a vapour bath and plenty of exercise; then a good dinner, consisting of the best roast and boiled meats, with choice vegetables, followed by game and wholesome puddings. All this sounds well, but then comes, alas! the beverage, three jugs of cold, sparkling, spring water! It reminds me of the men of Magdalen College, Cambridge, who were called in former times, "three-kettle men," from their fondness for tea. Then comes, I repeat, the beverage! Here I must decline following the disciples of Preissnitz further. Give me a few glasses of generous port wine, and I will leave them to exult in the success of their practice. Let them sing "Io triumphe" in the elasticity of their renewed health, and write over the thresholds of their doors, in letters of crystal, emblematical of the spirit that they worship,—

"Hoc opus, hoc studium, parvi properemus, et ampli,
Sic patriæ volumus, si nobis vivere cari."

I remain, Sir, your obedient servant,
HENRY WAKEFIELD.

Landsdowne-place,
Dec. 19, 1843.

DEVERGIE'S MINERAL SOLUTION.—This is composed of arsenious acid, ten grains; carbonate of potash, ten grains; distilled water, six pints and a half; alcohol (*de mélisse composé*), fifty minims; tincture of cochineal, as much as required to colour the mixture sufficiently. Each drachm of this solution is said to be equivalent to four drops of Fowler's liquor arsenicalis. M. Devergie employs this remedy with advantage in long-standing cutaneous eruptions, particularly those of a squamous and impetiginous nature. He indicates, as a constant result and symptom of cure, the appearance of dark-brown spots on all parts of the skin previously diseased, which persist for some months afterwards."—*L'Experience.*

THE CONFLICTING

OPINIONS ON SPERMATORRHŒA AND CONTINENCE.

TREATMENT OF SPERMATORRHŒA.

To the Editor of THE LANCET.

SIR,—I am much pleased to observe that the subject of spermatorrhœa is beginning to receive from the members of the profession the attention which its great importance deserves. It is not my intention, at present, to enter fully into its pathology or therapeutics, but merely to examine the facts and opinions which may be adduced, either for the purpose of justifying the illicit intercourse of the sexes, or, on the other hand, with a view of convincing us that such licence is not only unnecessary for the cure of this malady, but that continence can never produce it, or in any way deteriorate the general health. This part of the subject is manifestly of considerable moment, and Dr. Bull merits our thanks for introducing it in THE LANCET.

There exists on this, as on too many other subjects, no small difference of opinion; all observers, however, agree that spermatorrhœa may be produced by onanism, excessive venery, worms, hæmorrhoids, and constipation, which latter, I feel persuaded, is by no means an uncommon cause, more particularly when it is complicated with the former.

Professor Lallemand, of Montpellier, who has paid much attention to the pathology and treatment of this disease, has come to the conclusion that prolonged chastity is, indeed, almost invariably succeeded by spermatorrhœa; and he accounts for this result by asserting that after the age of puberty the seminal fluid cannot with safety be suspended or decreased, for no sooner does it collect than it begets incessant erections and nocturnal or diurnal emissions, which cannot be prevented but by sexual congress:—"It is the sole effectual means, both for the *present* and *future*." His pupil, Dr. Dangerfield, has lately supported the same views.

The late Dr. Ryan, of London (Manual of Midwifery, 1831, p. 60), thus expresses himself:—"All healthy persons, at the time of puberty, most certainly feel the passion of physical love. It is a part of their health, and as natural a consequence as *hunger* or *thirst*." . . . "It exists *independently* of the will; it may be restrained, but not extinguished. Reproduction seems to be a *common* law of animal and vegetable life, and the disposition to reproduce it in all healthy subjects is most powerful. It is a passion that must be gratified." Again, when speaking of the treatment of impotence from seminal emissions, he maintains that marriage is the natural cure for the complaint; but, never-

theless, although concubinage is immoral, it "is so often acted on, in general, without a medical counsellor, that we must not be too ready to censure the faculty for occasionally proposing it." "Absolute continence," he adds, "from venery, in a healthy subject much disposed to it, induces many dangerous diseases, and even deaths."

M. Cruveilhier, of Paris (LANCET, 1843-4, vol. i., p. 328), on the contrary, does not believe that spermatorrhœa is ever caused by venereal abstinence, nor will he consent to the doctrine that continence is prone to make inroads on the health of individuals. In support of the former, he reminds us of the physiological law "that the less a secreting organ is exercised, the less secretion takes place," and in proof of the latter he appeals to his own personal observation among the young priesthood. To these deductions Dr. Bull consents, and contends that physiological and ethical laws can never be hostile to each other.

Dr. Carpenter (Principles of Physiology, 1842) concurs in these opinions, and censures those practitioners who recommend immoral connections. Such advice is "immoral, as well as unscientific." He thinks that the secretion of the testicles is very much under the influence of the mind, and it cannot be denied that his remarks are pertinent. In another part of his volume, however, he writes thus:—"To the use of the sexual organs for the continuance of his race, man is prompted by a *powerful instinctive* desire, which he shares with the inferior animals." . . . "This instinct, when once aroused (even though very obscurely felt), acts upon the mental faculties and moral feelings, and this becomes the source of the tendency to form that kind of attachment towards one of the opposite sex which is known as love."

Now, when we meet with such opposing and conflicting statements as the above just enumerated, it appears to me that a more extended and closer investigation is required before we can arrive at just or satisfactory results. The subject is altogether of too much importance to justify us in advancing, as facts, opinions which may be only the fruits of immature observation. At present, then, *lis sub judice est*. Whether continence be productive of spermatorrhœa, or not, in men who have never deviated from the paths of strict rectitude, I cannot undertake to determine; but that it is surely a cause of this disease in those who have at one period of their lives indulged in coition, but have subsequently abstained from it for any considerable time, I most assuredly believe; and that the best, if not the only, cure for the malady is a moderate employment of the venereal organs. To this view I have been led from a tolerably fair experience. But I may be wrong; and after all, the whole difficulty in the medical science consists in ascertaining with certainty the precise influence which what we call causes exert on the animal economy. What is proved and received on one day is often disproved and rejected on the morrow. All must acknowledge the force of the objection urged by Cruveilhier. I cannot say that I have ever seen atrophy of the testicles in any healthy and normal individual, and I feel convinced that mental onanism (from which, perhaps, few are free) is alone sufficient to insure the secretion of the seminal fluid and to prevent the degeneration of the virile organs. Eunuchs even, according to Sir A. Cooper, are liable to erections and prostatic emissions.

I have been acquainted with but very few priests, but those whom I have known were healthy-looking persons. It is out of my power to say whether they lead a life of continence or otherwise, but I am aware that some, at least, of our own unmarried clergy gratify their amorous dispositions. I was once consulted by a clergyman, for constipation, who practiced masturbation. He had never copulated, but had a great wish to be married; the *res angusta domi* prevented. He defended the practice of onanism, and urged that a man who did not enjoy sexual union was led to it instinctively. John Hunter asserted that masturbation, if confined within proper limits, was not injurious to the system.

But whatever differences of opinion may exist among medical men, in relation to the influence which chastity exerts in the production of spermatorrhœa, one thing is undeniable, namely, that the governments of Europe wink at the practice of illicit connection. In the time of Henry VIII. the stews of London were located in Southwark, and in France stews are publicly recognised at this very day. Moreover, the fact cannot be disguised, that there are few persons who have not given way to this vice, which is called by the historian Gibbon, the most liberal of all, drunkenness being the most illiberal. Although an indulgence in this vice is immoral, and notwithstanding the Saviour has declared that of all sins that of fornication is the most inimical to his religion, yet it does appear that the members of society seem much more willing to defend or excuse it, when confined to single men, than almost any other. Now, although I do not agree with Dr. Bull in believing that continence cannot ever give rise to the presence of inordinate seminal discharges, or be otherwise obnoxious to the general health, but, on the contrary, that moderate sexual congress is required to preserve the health, still I cannot either advocate the practice of onanism, or justify fornication. The latter tends greatly to the demoralisation of the human species, and is frequently followed by the most wretched ailments. It aims a death-blow to the two great pillars of human society—marriage and parental care. No

man either, who endeavours to act up to the precepts inculcated in the New Testament, can consistently or quietly recommend it. Can any believer in Christianity advise his fellow-man (more particularly when he is suffering from a most distressing malady) to spurn the dictates of his Maker to follow the courses of Mammon? But, say others, is he, then, miserably to pine away and perish? I answer, no; let him rather marry, and "eat the bread of carefulness." What, urge a man to disgrace his family and to burthen the state by entering into a matrimonial alliance when he has not the means wherewith to do so? Would any Christian believe that there is a society in being which holds out pecuniary rewards to labourers to remain single till they have attained the age of thirty? Would they have men for a period of eight years go about trying to seduce their own daughters, perhaps, or those of their fellow-men? No; let them restrain their passions. Yes; but that is in the power of very few men to accomplish. If we could, indeed, command our appetites, life might approach truly unto happiness. Erroneous views of life usually lead to unnatural and unfair designs. Knowledge, if not necessary to virtue, is of great assistance to it. We are told by the apostle it is better to marry than burn, and that marriage is honourable to all men; but hear what the shrewd and learned Burton (himself a divine) says,—"No man shall marry until he be twenty-five, no woman till she be twenty—*nisi aliter dispensatum fuerit*. If one die, the other party shall not marry until six months after, and because many families are compelled to live niggardly, exhaust and undone by great dowers, none shall be given at all, or very little, and that by supervisors, rated; they that are foul shall have a greater portion; if fair, none at all, or very little; however, not to exceed such a rate as those supervisors shall think fit. And when once they come to those years *poverty* shall hinder no man from marriage, or any other respect; but all shall be rather *enforced* than hindered, except they be dismembered, or grievously deformed, infirm, or visited with some enormous hereditary disease, in body or mind, in which cases, upon a great pain or mulct, man or woman shall not marry; other order shall be taken from them to their content. If people over-abound, they shall be eased by colonies." (Burton's Anatomy of Melancholy: Democritus to the Reader.)* Of course, we have improved much since Burton's time, and we now have an opportunity of reading the instructive pages of Malthus. "How odious and abominable are those rash vows which bind and inforce men and women to vow virginity, to lead a single life against the laws of nature, opposite to religion, feeling, and humanity! so to starve, to offer violence, to suppress the vigour of youth! and all for base and private respects to maintain their gross superstitions, to enrich themselves by hindering some marriages, that the world be not full of beggars, and their parishes pestered with orphans."

A few words as to *the treatment* and I have done.

The bowels must be kept regular by the use of mild aperients, or (what is better) by means of enemas, which should be thrown up every morning. The genitals and thighs to be sponged with cold water, and the greatest care should be employed to wash away the secretion which accumulates around the corona glandis. The general surface of the body may most advantageously be benefited by the daily ablution with salt and water. An injection, composed of twenty minims of the sedative liquor of opium in water, should be had recourse to every night on going to bed, care being taken to allow it to remain in the urethra for some time. A leech or two may occasionally be applied to the perineum, or under the root of the penis. The solid nitrate of silver I have found an excellent remedy when applied to the orifice of the meatus, but I have not employed it more than once a week. It affords much relief, but it is not permanent. I have never used it as lauded by Lallemand. The patient should sleep with his head high, and on his side: I have generally noticed that seminal emissions occur towards morning, when the person is lying on his back. The disulphate of quinine with sulphuric acid may be exhibited internally, and afterwards iron may be gradually persevered in. Tea and coffee should be avoided, and fresh milk used in their place. There is no objection to the patient's taking mild bitter beer at dinner, but wine must be banished. Great restlessness is a constant attendant on this disease, and opiates have been extolled, but I have never given them a trial. When lettuces are in season one may be taken for supper, about an hour before bedtime. The bed-coverlets should be thrown down towards the foot for some time before the patient retires, and if towards morning the afflicted individual finds that he has had but little repose, he should turn them down again, and walk about the room for a few minutes. By this simple method sleep may often be procured, but under these circumstances he should not rise early. The patient should marry, but he must not indulge in venereal combats more than once or twice a week. Venery is very apt to cause balmy and refreshing repose,—"Finito opere, cupido pacatur, irritatio summovetur, corpus solvitur, et somnus facilius obrepit." All mental

* This quaint, learned, and amusing work should be in the hands of every medical man.

onanism must be destroyed, for there can be doubt that the "lust of the eye" tends greatly to augment the complaint. Until it is perfectly cured, horse-exercise should be strictly prohibited; but walking may be undertaken daily. The attention should be fixed on some engaging occupation, and the society of indelicate females must be discarded. Frequent changes of scenery are of much service. Obediently yours,

T. C. Lewis, M.R.C.S., &c.

Wolverhampton, Dec. 19, 1843.

ON THE PREVENTION OF SPERMATORRHŒA, AND THE SALUTARY EFFECTS OF EARLY MARRIAGE.

To the Editor of The Lancet.

Sir,—It is with much pleasure that in your independent Journal, the pages of which are impartially open to combatants on either side of a question, I have lately read the communications of Dr. Dangerfield, Mr. Chatto, and Mr. Dudgeon, on the cure and prevention of spermatorrhœa. It is chiefly with respect to the remarks of the second-named gentleman (page 399) that I desire to trespass on your attention. Nothing that I could suggest is necessary to add force to his admirable letter, to the whole argument in which I cordially assent, and which I will now endeavour to follow up from a point at which Mr. Chatto has left the subject. To take "the bull by the horns," I would urge a strong doubt whether much of what the world calls "morality," with reference to continence, be really morality in the abstract. It is not so, unless morality consist in opposing physiological laws, which Dr. Bull agrees never can take place. Acts which directly or indirectly injure others, as murder, theft, and adultery (which last is, indeed, a species of theft), are directly denounced in the commandments of the Supreme Being, and are justly regarded by the common sense of mankind as *crimes*, and punished accordingly; but it is, at least, a great stretch of dogmatism to extend the term crime, or *immorality*, to acts which are in nowise emphatically forbidden, like the foregoing, by divine command, nor which the common sense of mankind (in civilised countries, at any rate) has yet learned to consider as coming under judicial cognisance,—acts, indeed, which not only of themselves cause no injury to other individuals, but are even self-preservative. For there is no need here to recapitulate the argument that every organ of the body demands due exercise for the maintenance of its healthy condition; this proposition already takes rank as an established fact; and, such being the case, I unhesitatingly assert that to hinder the due employment of any organ to the extent commensurate with or necessary to health, is to contravene the laws of God and Nature in deference to the absurd and unnatural prejudices of man! Freely will I adopt Dr. Bull's own dogma, "The laws of physiology do not here, any more than elsewhere, infringe on those of morality."*

It has been truly enough said by an English poet,

"Who lives to nature rarely can be poor."

Neither, we may add, will he be habitually unhealthy; and it would have been well and wise if mankind in different ages, in forming their institutions, had kept the dictates of nature more steadily in view, and thereby built up their codes of "morality," upon a more rational and firmer basis. The laws of physiology displayed before us have been stamped upon the universe by its Creator, and are infallible, irrevocable, and co-existent with the universe itself: the laws of so-called "morality" consist in mere human dicta, wavering and uncertain, and have varied in each different clime and country, as all history will show. Future nations will arise, and future and different moral codes will replace those of our day. For our own part, we live, indeed, in so artificial a state of society that we can indulge little hope of speedily witnessing any great divergence of our code of morality to the side of reason and nature. It is scarcely possible to believe that, with the continual spread of rational information, the laws of physiology will remain equally neglected; and the philosophical inquirer, who pleases himself by looking beyond the present, may confidently anticipate an epoch when much of the pseudo-morality will find its true level, which at present disfigures an age claiming for itself the designation of an age of science.

Dr. Dangerfield, in his answer to Dr. Bull (p. 398), quite correctly adverts that he had, in his summary of spermatorrhœa (page 210), advocated nothing calculated to offend against the most fastidious rules of conduct, and that he by no means recommended what is termed illicit sexual intercourse as a remedy for spermatorrhœa and its attendant evils, but that his observations were entitled to a more kindly construction, as applying to early marriage. It were uncourteous, if not insulting, to Dr. Dangerfield to put another construction on what he says; for what practitioner of character and correct feeling is there, having the care of cases requiring the treatment under consideration, whose *first* impulse would not be to suggest marriage instead of a less honourable connection? And this is a fitting place enough to remark that were early marriage more often

* Lancet, Dec. 9, p. 329.

resorted to as a remedial measure than it is, many diseases and evils which afflict society, besides spermatorrhœa, would probably find a ready termination, which are now little tractable under our hands.

There are those, Mr. Editor, who think, with Malthus and his followers, that population has a tendency to outrun the means of subsistence, and they therefore exert all the methods and arguments in their power to check marriage, particularly early marriage, and with it, as they suppose, increase of population. I confess that I am not one of these *progeno-phobists*. It may be true, indeed, that many districts in Great Britain are over-populated, and that there misery and destitution often prevail to a lamentable extent. But I apprehend that the primary cause of these evils is less to be sought for in early and (so considered) imprudent marriages, than in circumstances that have been anterior to these. Bad laws and excessive taxation have long weighed down the great mass of the people of this country, and have, doubtless, deteriorated the race, as the inferior development of much of the factory population too amply testifies. Give them cheap bread. Remove some of the burdens that press on them! Afford them a *chance* of doing something more than live from day to day—of acquiring a few worldly possessions—and the love of property will soon begin to exert itself so as to interpose the "moral check" that the Malthusians advocate, and to lead the artisan to substitute other aims for the sexual pleasure and other base indulgences which he now plunges into in sheer despair at ever being better off. But whether or not excess of sexual indulgence be a cause of increase of population, it is not proved—nay, I believe it may be positively denied that early marriages are, on an average, attended with a larger progeny than others. I hesitate to put this forward as an assertion in the absence of proof, though I am impressed that I have seen authentic statistical records which prove, incontestibly, the correctness of such a denial.* Meanwhile, for the present, in place of more conclusive evidence, I beg to refer readers to page 837 of THE LANCET, vol. i., for 1842-3, where will be seen a statement showing that in France, where marriages are, at any rate, much earlier generally than in England, the number of births is much fewer in proportion. But supposing, for the sake of argument, that a larger progeny resulted from early unions than from those formed later in life, it must be obvious to the physiologist that the offspring of the former will be endued with the better organisation. The true aim of the medical philosopher and the far-seeing politician is not to hinder marriage and increase, but, in their several ways, to *promote the formation of healthy organisms*. It is not the abundance of population, abstractedly considered, that it is to be eschewed, but the superabundance of an unhealthy, malorganised, half-fed, and emaciated offspring of impoverished factory-labourers,—the perpetual sport of the fluctuations of trade. It is such a progeny as this, one of helpless beings, too feeble in body and mind to provide through life for their own wants—a progeny the result of laws that are made for the rich at the expense of the poor—it is such beings that make the weakness of a country, and puzzle its rulers to find a subsistence for them. Of a full-bodied, well-formed, healthy population—those endued with active vitality, a muscular frame, and a well-developed brain, and, consequently, well adapted under all circumstances to provide for their own wants and well being—of such, a country can never have too many.

It can scarcely need to be argued that such a population, a race freed from debility in any of the organs, is most likely to descend from parents in the bloom of life. A race procreated in the vigour of manhood, and not in the decline of life, or *premature senility*, might clearly be expected to possess sexual (as, indeed, all other) organs of a more healthy tone; and the tendency of early marriage to check or avert spermatorrhœa and such like evils would manifest itself alike on an individual and on his progeny. In another generation—one endued with a frame in which the organs of vitality (organic life) are subordinated to the government of a firm will and a well-developed brain—the malady of spermatorrhœa and the vice of onanism would scarcely have to be combated.

Yet serious moral considerations would prevent the recommending marriage to *all*, and particularly to such as have been long affected with spermatorrhœa; for a matrimonial union is to be regarded with reference to the interests not of one only, but of others, and eminently the progeny. To grapple with the evil, then, in *certain cases* it will be, in the truest sense, morally incumbent on us to recommend a connection that promises to be *infertile*. Before I proceed further let me here stop to say that I by no means vaunt sexual intercourse, fertile or infertile, as an universal panacea for the evil in question. I am far from undervaluing the other means employed with remedial views. Self-restraint ought to be urged on the patient, and carried out as far as possible, exercise to fatigue imposed, and medicinal remedies of various kinds carefully employed, before habitual intercourse is ordered,—the cold hip bath, cold ablution of the genitals, and iron; but there will be temperaments and cases in which all these remedies will fail. In such,

* If our correspondent could lay an abstract of these before us, he would materially add to the strength of his position.—ED. L.

to prolong continence will be to peril the health and existence of an human frame—that structure emphatically said to be created "in the image of God"—for the sake of what the world calls "morality," but which, under such circumstances, I consider very questionable *morality*. In nearly all ages and countries meretricious commerce has been at least winked at and tolerated, if not openly encouraged, as a necessary evil. When can it prove more necessary, and less an evil, than in such a cause as this? Against it, nearly the only alternative is masturbation. A trite maxim is, "Of two evils choose the least." Who, then, will hesitate between these, seeing that though both the one and the other may be, in the judgment of society, pronounced immoral, one practice sins against the canons of society only, whilst the other equally outrages moral and physiological laws. If, in such dubitable questions as the foregoing has seemed to be, we will but open the book of Nature, and be content to be guided by her dictates, we can hardly be led far wrong; for while a conformity with her laws will inevitably be attended with good, a departure from these she will never fail signally to resent.* I am, Sir, your obedient servant,

AMICUS VERITATIS.

Pimlico, Dec. 25, 1843.

ON

PARACENTESIS THORACIS.

To the Editor of THE LANCET.

SIR,—Having paid considerable attention to the subject to which observation is called in THE LANCET of Dec. 9th, page 343,—paracentesis thoracis, or empyema,—I forward to you the following remarks:—

Paracentesis of the thorax may be performed to relieve the cavity of the pleura from an accumulation of blood, air, serosity, or pus. In lesions of the parietes of the chest or lungs, the hæmorrhage into the pleura may be so extensive as to render it necessary to alleviate the suffocation which follows, by affording a free exit to a portion of the effused blood. There are many cases on record in which the practice has been adopted with success. Still, the gravity of the case is so much increased by the free admission of air into the cavity of the pleura, that the operation of empyema is now never resorted to in order to relieve the pleura of effused blood, if it can possibly be avoided. The same remark equally applies to pneumo-thorax, in which affection it is sometimes, but rarely, necessary to resort to this operation.

It is more especially in the form of hydrothorax which follows pleurisy, that empyema has been performed; and that with such varied results that it is by no means easy to form a correct opinion of its efficacy and value as a remedial agent. When serous inflammations manifest themselves in debilitated subjects they are very apt to become chronic; indeed, this sometimes occurs in persons of a naturally robust constitution, owing to neglect, improper treatment, or to some unknown individual peculiarity. When this is the case, the serous membrane remaining chronically inflamed, or the economy not having the power to reabsorb the effused fluid, the quantity of serosity contained in the cavity of the pleura increases until, after weeks or months of disease, the life of the patient becomes endangered through the gradually increasing dyspnœa, or through the hectic fever and marasmus. The patient may arrive at this stage of the disease in a much shorter time when the intensity of the primitive attack of pleurisy is such as to give rise to the formation of pus. Pus, when effused into the pleura, is sometimes, but rarely, absorbed; generally the patient is either carried off by the disease, or a subacute state of inflammation is kept up, under the influence of which the quantity of sero-pus gradually increases, until the patient arrives at the stage just described.

It is chiefly in such cases as these that the operation has been performed. In the very great majority of the instances in which it has been resorted to it has proved fatal; or, at least, the patients have died, either from the disease itself or from the results of the operation. There are, it is true, a certain number of successful cases on record, but they are few compared to the number of those on whom the operation has been performed. There is a case of successful operation in the "Memoires de l'Academie de Chirurgie," by Morand; another of Larrey's, in his "Memoires de Chirurgie;" there is the case of Dr. Archer, in the Transactions of the King's and Queen's Colleges of Physicians, Ireland, quoted by Mr. Samuel Cooper. M. Roux performed the operation successfully, a few years ago, on a man now living at Versailles, and detailed the case at a debate of the Academie de Médecine on this subject. Sir Astley Cooper mentions having seen one successful case. In the medical journals are also found various cases of success or partial success. Thus, in THE LANCET we find, in 1829, an account of a discussion on empyema which took place at the London Medical Society, at which Dr. Davies mentioned the rather singular fact that he had saved six out of nine patients on whom he had performed the

* As shown particularly by Combe (Constitution of Man considered in relation to External Objects). This excellent work, which ought to be in the hands of every one, is published cheaply enough for that purpose, the "People's Edition" being sold at 1*s.* 6*d.*

operation. In the same journal was inserted, a few years ago, a clinical lecture delivered by Dr. Roe, in which he states having had several successful cases. There is also the case of Mr. Worthington, who punctured the thorax of the same patient three successive years; that of Mr. Macnee, of Glasgow (April, 1836); that of Dr. Fletcher, of Birmingham (1841); that of Mr. Hale Thompson (1837). Three years ago, my friend, Mr. Beck, of Upper Marylebone-street, punctured the thorax of a man of twenty-six, for empyema, who is now alive and well.

On the other hand, the celebrated French surgeon, Boyer, in his long career, often performed the operation, but never saved a patient. Dupuytren only knew it to succeed twice out of fifty operations which he performed or saw performed. Sir Astley Cooper, as I have just stated, was only acquainted with one successful case. M. Gendrin, the well-known physician to La Pitié, has himself performed empyema on twenty-six patients, not one of whom has survived. I have myself witnessed three unsuccessful cases.

In order to understand the cause of this fearful mortality we must analyse the operation itself, and examine what are the results which follow its performance. Hippocrates advises the thorax to be opened at the level of the fourth rib (counting from below), a portion only of the fluid to be evacuated, and then the orifice to be closed. This process is to be repeated every day during thirteen days, and on the fourteenth a large opening is to be made, the remainder of the fluid evacuated, and the wound allowed to remain fistulous, as a vent for the contents of the pleura. In this, the primitive operation, as it may be called, we find the element of all the various operations that have since been performed. These latter may be classed under three heads:—1. The chest is punctured, once or several times, with a trocar; part or all of the fluid is evacuated, and the wound is each time immediately closed. 2. One or more punctures are first made, and after a variable period a wide opening is made into the chest, which admits, freely, the entrance of air and the egress of serosity or pus. 3. A free incision is at once made into the cavity of the pleura, and its contents evacuated.

These three modes of operating, all of which are denominated by authors paracentesis thoracis, or the operation of empyema, comprise, in reality, two distinct operations, the results of which are very different. In the one, the first, the pleura is merely punctured. More or less air may enter the cavity of the chest during the operation, but the wound being closed as soon as the evacuation of fluid has ceased, there is no free communication established between the cavity of the pleura and the external atmosphere. In the two others, whether the thorax be freely opened at once, or whether the pleura be previously punctured with the trocar, in order to diminish the quantity of fluid, and thereby to enable the compressed lung to expand, the final result is the same, a free communication between the external atmosphere and the cavity of the pleura. The sequelæ of these two operations, their effects on the disease itself, are very different.

When the thorax is punctured, a certain quantity of the fluid contained in the pleura may be evacuated, without air entering through the trocar; but as the flow of fluid diminishes, air generally passes into the chest during inspiration. Along with Dr. Roe, I do not, however, think that the mere entrance of a small quantity of air into the pleura during the operation is much to be dreaded, or, indeed, that any importance should be attached to it, providing the wound be closed as soon as the trocar is extracted. Supposing, therefore, that, as is generally the case, no acute inflammation follows, and that the small wound heals and does not become fistulous (as in one of the cases which I have seen), what effect does the operation produce? A certain quantity of fluid has been extracted from the pleura, fluid which the economy was unable to absorb; the impending asphyxia produced by the pressure exercised on the working lung has been averted, and the compressed lung, if not too firmly bound down by false membranes, is able to expand. But the disease of the pleura has not been cured; there is still inflammation, still effusion, and, generally speaking, the effusion soon regains its former volume, producing the same symptoms, to be relieved by the same means. It is, therefore, evident that mere puncture of the thorax is only a palliative, and not a curative remedy. In all cases, however, it momentarily relieves a distressing and dangerous symptom, and may, by allowing time for the economy to recover itself or for other remedies to be used, lead to a definitive cure. It is in this way that we must explain the success of Mr. Worthington, Mr. Macnee, Dr. Fletcher, Mr. H. Thompson, and Mr. Beck, whose cases I have mentioned. These gentlemen all merely operated by the puncture of chest.

The second and third modes of operating are merely the operation of Hippocrates modified, inasmuch as the cavity of the pleura is, either after several punctures, or at first, freely laid open. Thus, the atmospheric air is allowed to pass in and out at each inspiration and expiration, the orifice being generally kept open by lint canules, bougies, &c. Whatever be the nature of the fluid contained in the pleura, the result of the free contact of the external atmosphere with its surface, is always, or nearly always, an intense exacerbation of the existing inflamma-

tion, and the formation of pus, if it do not already exist. The pus itself soon alters in quality, generally becoming fetid, like the pus of all large abscesses in contact with the atmosphere. In fact, the pleura *has become a large abscess*, which secrets pus from its lining membrane, like other abscesses, exposes the patient to the same dangers, and can only be cured in the same way, that is, by the obliteration of the cavity it forms. Then begins the real process of cure. If the lung be not too firmly bound down by false membranes, it expands more or less, no longer being compressed by the superjacent fluid. The parietes of the chest, not being supported by any internal resistance, gradually give way under the influence of muscular contraction, and of atmospheric pressure; and the side of the thorax on which the opening is made shrinks inwards, towards the median line. The healthy lung, also, having double work to do, expands, enlarges, and encroaching on the diseased side, tends to diminish the abnormal cavity. Under the influence of all these causes the two sides of the pleura are at length brought into contact, either entirely or partially, and the cavity of the pleura being thus obliterated the cure is accomplished. In all the successful cases of this kind, with the detail of which I am acquainted, the patients were months, sometimes years, before the suppuration from the fistulous orifice ceased.

Dr. Davies did not mention at the London Medical Society in what manner he had operated in his six successful cases, merely remarking that in *one* instance the orifice remained open for a great length of time, and gave exit to a very abundant suppuration. He states, however, that five of the six patients on whom he had operated were under six years of age. This is a very important feature in the history of the cases, as it is easy to understand that with children, even were the thorax opened, the process of cure which I have above described would necessarily be much more easily accomplished than in adults. In children the ribs and cartilages are still very supple and ductile, a circumstance which must greatly facilitate the approximation of the sides of the pleura, and thereby dimiaish the length and intensity of the suppuration.

In M. Gendrin's seventy-six fatal cases, and also in those of Morand, Larrey, Boyer, and Dupuytren, as far as I can ascertain, it was not the mere puncture that was resorted to; the chest was freely opened. They must, therefore, be all referred to the second, the more dangerous operation. Now, when we consider the debilitated state in which those generally are in whom this operation becomes indicated, is it surprising that they should nearly all succumb under the influence of a lengthened suppuration of the entire cavity of the pleura, accompanied by all the general disturbance which follows the suppuration of large cavities communicating with the atmosphere.

From what I have said it is evident that the results of the two operations, which are confounded under the name of empyema, or paracentesis thoracis, are so totally different that the operations cannot even be compared. The one, mere puncture, although not unattended with danger, is comparatively harmless when contrasted with the free opening of the thoracic cavity. It is, however, only a palliative remedy, and in chronic severe cases must generally prove useless. Its value as a means of treatment in intractable cases of effusion, in which, however, the life of the patient is not absolutely threatened, remains to be tested by experience. M. Trousseau has recently presented a memoir on the subject to the Academie de Médecine, but the details into which he enters have not yet transpired.

As regards the free opening of the chest in cases of chronic effusion, it must be looked upon, by all those who have studied the annals of science, as a desperate remedy, as one which is occasionally successful, but which is so generally fatal in its results as to render it only justifiable as a last resource.

What course, then, is a medical man to follow when he has to deal with a severe case of chronic pleurisy accompanied by great effusion? If he has in vain used all agents which therapeutics and hygiene place in our hands in order to subdue morbid action and to promote absorption, if the life of the patient seems threatened by the persistence of the effusion, then I think he is perfectly justifiable in performing the puncture of the thorax, once or oftener. I would have him, however, only have recourse to the more severe operation if all other hope were lost, as it presents but very slight chances of success.

When once the cavity of the pleura has been freely opened, the principal attention of the medical man should, in my opinion, be devoted to the general health of the patient. However valuable digitalis, nitre, elaterium, &c., may be, administered before the operation has been performed, when there is an enormous effusion of fluid in a cavity of the economy to be absorbed, they become, I think, comparatively of little value when once an opening has been made into the chest and the effusion has been evacuated. The indication is then to fortify the economy by tonics, medicinal and alimentary, and thus to prepare it to resist the lengthened suppurative process which it has to go through. Such, at least, is the result at which I have arrived from the careful study of the cases which have fallen under my own observation, and the attentive perusal of what has been written on the subject.

Trusting you will not find these remarks too long for insertion, I remain, Sir, your obedient servant,

HENRY BENNET, M.D.

9, Cambridge-square, Hyde-park,
Dec. 16, 1843.

*** The foregoing letter by Dr. J. H. BENNET has been selected by us for publication from among several communications which have been addressed to us on the above subject. We thank our correspondents, generally, for the attention which they have devoted to the request which we recently made to them in relation to the treatment of hydrothorax.

ST. THOMAS'S HOSPITAL.

SCIRRHUS OF THE BREAST. EMPLOYMENT OF PRESSURE ON DR. ARNOTT'S PLAN. CONSIDERABLE RELIEF. SUBSEQUENT EXCISION.

HANNAH STEVENS, ætat. 45, a cook, of rather stout habit and sallow complexion, was admitted July 18, 1843, under Mr. Mackmurdo, for a tumour in the left breast. She has one child, but has been a widow for the last twenty years. Her general health has been, on the whole, good; that is, she has never suffered from any serious illness, but has been more or less subject to occasional cough. The catamenia ceased without constitutional disturbance about two years since, up to which time she had been perfectly regular. At the end of last March she first noticed a small swelling in the neighbourhood of the nipple, which led her to remark that the breast was growing again. At first the enlargement was unattended with either pain or tenderness, but in a short time the increased size, as well as uneasiness of the tumour, induced her to seek advice. On admission into the hospital, the tumour, which presented a flattened character, was altogether superior to the nipple, which was not involved in the disease. There was considerable tenderness on pressure, and the periodical pain was sharp and plunging. The axillary glands were neither tender nor enlarged. At Mr. Le Gros Clark's suggestion (to whom the subsequent management of the case was confided), Dr. Arnott's plan of pressure by means of an air-bag was employed. Its employment was commenced with prejudice on the part of the patient, a fact worth recording on account of the marked alleviation of suffering which resulted from its application. Pressure was first applied on the 15th of August, and as soon as the inconvenience attending the application of the apparatus had subsided, the patient expressed herself as feeling much more comfortable, from the support it gave to the breast and the comparative freedom from pain. This satisfactory report, in addition to the apparent (the patient and her sister say real and very decided) decrease in the size of the tumour, encouraged a hope that permanent relief may be obtained; for the woman's report was that "she often passed days with little or no pain." The plan of treatment was accordingly persevered in for six weeks, but the aspect of things changed during the last fortnight of its employment. The tumour increased sensibly in size and the pain returned, though not to a distressing extent. The nipple became now involved and retracted. She had pain, moreover, in the axilla, where an enlarged gland was now perceived, and she complained of shooting pain down the arm. Becoming anxious for relief, a consultation was held, when it was agrred that the existing condition of the breast rendered it desirable that the tumour should be removed before it gained further ground, or the local symptoms became more considerable.

The operation was performed by Mr. Clark on Saturday, October 7th. Two lunated incisions, the convexity of which was directed downwards and outwards, were made to meet at their extremities, including the nipple between them. The integument and subjacent fat were then separated from the tumour, which was found more extensive than anticipated, the diseased growth being adherent to the pectoralis major, a few fibres of which were removed with it. Ligatures were applied on two vessels, and the edges of the wound (which, from the corresponding direction of the incisions, were easily adapted) were brought together with strips of adhesive-plaster, and a dossil of lint laid over.

With respect to the palliative treatment first adopted in this case, it may be considered that the result is such as to encourage rather than deter practitioners in the use of a simple measure, were it only for the alleviation of suffering. But in this instance the relief was well marked, and was expressed in spite of previous prejudice, and without the fear of the ulterior measure ultimately resorted to, and which, when deemed advisable, was rather sought than shunned by the patient. The growth of the tumour, moreover, was unquestionably controlled, and some diminution in its size was even perceptible, although not, perhaps, to the extent believed by the patient. These facts were rendered more apparent and remarkable by the greatly-increased pain and more rapid growth of the tumour during the last week, when the apparatus was removed. A section of the tumour, it may be remarked, exhibited the characteristic appearances of well-marked scirrhus.

PLASTIC OPERATION FOR THE RELIEF OF ECTROPIUM.

On the same day Mr. Mackmurdo performed the above operation on Elizabeth

Gammon, ætat. 53, spare and sickly-looking, admitted into the hospital September 19, 1843. She suffered, about four years since, from extensive ulceration of the face, with subsequent exfoliation of the nasal, and portions of the superior maxillary and palate bones. The disease, according to her own showing, was of syphilitic origin. Her present application is to obtain relief for an aggravated ectropium of the left eyelid, the condition of her right eye being irremediable, both eyelids being permanently everted by the contraction of neighbouring cicatrices. The sight of this eye is quite lost, and a portion of the constantly-exposed cornea has become cuticular. The sight of the left eye is also imperfect. The upper lid is tied to the contracted skin of the forehead, and the everted conjunctiva is thickened and granular.

Mr. Mackmurdo commenced his operation by removing the diseased and contracted cicatrix of the brow. A crescentic fold of integument was then raised from the temporal region, turned, and fixed in its new position, immediately above the superciliary ridge, by a sufficient number of sutures. The edges of the temporal wound were then approximated by means of two sutures. The immediate relief to the deformity was considerable, and it is intended, at some future period, to render it yet more complete by the excision of a portion of the granular conjunctiva.

THE LANCET.

London, Saturday, December 30, 1843.

THE discovery of *tritoxide and deutoxide of proteine* may be announced. BERZELIUS long since stated that fibrine and albumen were partially dissolvable by boiling with water. MULDER has now found that fibrine, or albumen, derived from any source, are acted on by means of boiling, with water, for four hours; that fibrine, boiled again for four hours, will have an additional quantity of its amount dissolved, an insoluble substance at length remaining, which is of constant composition; that the substance which is soluble in water is precipitated by acetate of lead, and is *tritoxide of proteine* (by analysis); and that the insoluble substance is *deutoxide of proteine*. The residue, after long boiling of albumen, differs from that obtained from fibrine. It is still unaltered albumen.

The deutoxide of proteine, thus formed, is identical with that which was long since obtained by MULDER by the action of chlorine on proteine. The proteine that is obtained by precipitation from an alkaline liquid, is least oxidisable. Fibrine is the most easily oxidised. Tritoxide of proteine occurs in healthy blood, in the residue after the fibrine, albumen, and hematosine, have been separated; that is to say, in Dr. BOSTOCK's "serosity," or the "gelatine" of the old and new French schools. Deutoxide of proteine pre-exists in the hair.

Albumen differs from fibrine in being incapable of forming deutoxide of proteine. Fibrine is also soluble in very dilute hydrochloric acid, but coagulated albumen is not soluble without pepsin.

The fibrine is the especial substance in the blood which becomes oxidised in the blood, forming *tritoxide*,—a change which takes place, also, when fibrine, out of the body, is exposed to oxygen gas. The oxygen, as tritoxide, goes to the capillaries, where it is given up, since, in the venous blood, less of the oxides of proteine are present.

The buffy coat, boiled for a quarter of an hour, in water, had 14 per cent. dissolved, and 86 undissolved. But the soluble and insoluble substances differ, by analysis, from fibrine. The soluble is *tritoxide of proteine*; the insoluble is *deutoxide*, and, probably, no fibrine at all exists in inflamed blood. Thus, if the oxidising process be excessive, inflammation ensues,—a great excess of tritoxide, and deutoxide of proteine being found, actually present, in the blood. In fact, fibrine is no longer there, but the oxides of proteine which have been formed from it.

The deutoxide of proteine has the exact composition of the substance that was analysed by DUMAS, which DUMAS has confounded with fibrine.

THE beneficial influence, on health, of a duly-regulated exercise of the muscles has always been fully acknowledged, and the importance of throwing certain sets of muscles into frequent and vigorous action is recognised in the treatment of some forms of spinal distortion, and other cases of disease. But the hygienic influence of corporeal exer-

cise, although sufficiently acknowledged, is not sufficiently brought into play, while the therapeutic indications which such exercise is capable of fulfilling, as well as the cautions to be observed in its use, seem to be understood only in a very limited part of their extent. Many persons, especially inhabitants of large towns, who are, to all appearance, in good health, are little aware that they labour under an extreme and habitual debility of the muscular system, arising from defect of exercise. In London, for example, how many young men, apparently robust, would be tired almost to death by a walk of ten or twelve miles! Yet, to a really robust young man, such a walk ought to be a mere whet to his appetite for dinner. The effects of this desuetude of exercise, though they may at first be perceptible only on the system more immediately concerned, begin, sooner or later, to tell upon the general health. How, indeed, can it be otherwise? A certain proportion of nervous power, generated we pretend not to determine how, or where, is destined by nature to be dispensed to the voluntary muscles, through the motor tracts of the spinal cord. But if this energy be prevented from expending itself through its natural channel of muscular activity, what consequence is more likely than a morbid accumulation of excitability, and universal disorder of the nervous functions? Accordingly, in such cases as those here instanced, the nervous system becomes generally deranged; the sensations of the patient are morbidly acute or dull; his mind is listless or desponding; his sleep is disturbed, or preternaturally profound and protracted, and is in neither instance followed by the refreshment attendant upon healthful slumber. Again, as the action of the voluntary muscles affords considerable aid to the venous circulation, the sanguiferous system also becomes directly implicated; the action of the heart is enfeebled, and various states of vascular congestion and chronic inflammation are induced. The concurrence of these evils, affecting at once the cerebral circulation, and the innervation and vascular actions of the chylopoietic organs, what wonder if the patient become dyspeptic, hypochondriacal, or slightly deranged in his intellect? The frequency of dyspepsia among persons who lead a very sedentary life is sufficiently known; but it is no less true, though, perhaps, not so generally familiar, that they very frequently labour under some unsound condition of mind; some visionary source of physical uneasiness or moral despondency; some absurdity of habit, or extravagance of humour, which shows that the sensorial functions are not altogether unimpaired. The evils induced by defective muscular exercise are in no instance more conspicuous than in the hysterical affections of women. Those females, such as sempstresses and many others, whose occupations condemn them to a sedentary life, are almost invariably hysterical, and many of them to the most painful degree. Though this is partly dependent on the privation of fresh air and healthful amusement, it is in no small degree attributable to muscular inactivity. Nor are the effects of this cause confined to the laborious classes of the female sex. The vicious indolence of the rich frequently produces results similar to those of the compulsory inactivity of the poor; and many a lady is inveterately hysterical from no other reason than that she lies on a sofa all day.

But this leads us to consider the therapeutical agencies of muscular exercise. Some of these, as before observed, are well known, but the use of corporeal exercise, to which we would here particularly advert, is to be found in the treatment of those cases which are usually designated *nervous*. Many of these, as we have seen, originate principally in defect of exercise, the restoration of which is therefore the natural indication; while others, which arise from different sources, are no less benefited by the adoption of the same remedy. Many a lady who would faint at the bare prospect of having to walk half a dozen miles, and who, in effect, would at present be utterly inadequate to the performance of such a feat, is little aware how much her health and happiness would be improved if, by a gradual extension of her muscular activity, and, as a necessary consequence, of her muscular power, she were to learn to walk double that distance every day. One of the most popular provincial physicians of the present day is remarkably successful in the

case of hysterical ladies and nervous gentlemen, because he *makes the people walk*. And we can assure our readers, from manifold experience, that in purely nervous affections of both sexes, there is no remedy more powerful than muscular exercise properly adapted to the strength of the patient, and gradually increased as that strength improves,—a result which never fails to take place, and often to an extent altogether surprising. Many a nervous patient, who has gone the round of the doctors, and swallowed every antispasmodic in the materia medica, would find himself quite a new creature if he would this day begin the peripatetic system we have recommended, by walking far enough to tire himself slightly, no matter whether the distance required to produce that effect were long or short; then, for the next few days, walk the same distance, which, in a week or so, he would find practicable without any fatigue at all; then extend the distance little by little, until he found himself able to walk twenty miles a day without inconvenience. But, in impressing on the minds of our readers the great efficacy of muscular exercise as a therapeutic agent, we must not omit to caution them against its improper use; for it is a singular fact that although this agent is seldom employed in the vigorous manner we have recommended, in those cases in which it would be really beneficial, it is frequently applied, to a minor extent, in cases where it is decidedly prejudicial. Wherever there is *inflammatory action*, whether acute or chronic, muscular exercise is always injurious, because it excites the circulation. We do not recollect to have seen this remark made by any writer but Sir JAMES CLARK; it is, nevertheless, one of infinite importance in practice. The fact is, that there is not one therapeutic agent the true applications of which are less understood than those of muscular exercise. Thus, a stout gentleman, said to be "bilious," but whose real complaint is duodenitis, is desired to take a moderate walk every day, whereas he ought to be kept perfectly quiescent. Again, if we were to desire a pale, delicate-looking hysterical girl to try if she could not learn to walk ten miles a day without fatigue, we should, by many persons, be considered mad, yet it might possibly be the very best advice we could give her.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, December 12, 1843.

EDWARD STANLEY, Esq., F.R.S., President.

Case of alarming Syncope from the Admission of Air into a Vein during an Amputation of the Shoulder-joint. By BRANSBY B. COOPER, Esq., Surgeon to Guy's Hospital.

THE patient, a female, nineteen years of age, was admitted on the 17th of May, 1843, under the care of the author, for enlargement of the middle third of the humerus. She had suffered pain in the seat of disease for eight months, but the swelling did not commence until about six weeks before her admission into the hospital. From the history and the examination of the arm, the tumour was considered to be a malignant disease of the bone, and amputation at the shoulder-joint was resolved upon. This operation was performed on the 23rd of May. The arm was removed in less than a minute, and with very little loss of blood. When the limb had been severed from the body the patient, who had borne the operation with great fortitude, expressed her thankfulness with a firm and audible voice. The subclavian artery was immediately secured, but compression was still retained upon the first rib, as there were small vessels requiring ligature. The author then proceeded to remove a gland, which was somewhat enlarged, from the axilla; and, whilst dissecting it from the cellular attachments, he distinctly heard a peculiar gurgling noise, like air escaping with a fluid from a narrow-necked bottle, and at the same instant the patient fell into a state of collapse, threatening immediate dissolution. The countenance was deadly pale, pupils fixed and inobedient to light, the pulse quick, small, and fluttering, although at intervals regular. The respiration was irregular, being hurried and feeble, and attended, occasionally, with a deep sigh. The patient was directly placed in the horizontal posture, the flaps brought over the wound, and retained by plaster, and various stimulants were administered. An hour elapsed before she was sufficiently recovered to be removed from the operating theatre. Upon being placed in bed she passed her fæces and urine involuntarily. When the reaction was coming on she uttered a continual whining cry, and maintained a constant motion of alternate flexion and extension of the right leg, while the left remained perfectly quiescent, and seemed insensible to feeling, as well as motionless; she complained, also, of pain running up the right side of the head and neck. For several days she remained with her eyes closed, the lower extremities in the same condition as described, and the pulse very frequent. It was found necessary to administer opiates at

different times, which relieved her general restlessness and procured sleep. On the fourth day the left leg was also affected with involuntary contractions, but these subsided on the following day. On the twenty-fifth day she was able to leave her bed, the motions of the right leg had ceased at this time, and she complained of great numbness and loss of power in the left leg. On the 3rd of July she was sufficiently recovered to leave the hospital, having no other unfavourable symptom than a slight dragging of the left leg.

The author concluded his paper by adding remarks upon the consequences of air being admitted into the veins, and pointed out the resemblance between the symptoms of his case and those presented by similar cases upon record, as well as in experiments upon the lower animals, made to elucidate the subject. He drew attention to the different effects produced in man compared with brutes, by the admission of air, owing to the influence of mental agitation on the motions of the heart in the former. He also dwelt on the various modes of death in such cases, according as the air introduced distended and paralysed the walls of the right cavity, or was sent, mixed with blood, onwards to the lungs, or was transmitted by the arteries to the brain; and he ended by offering some practical remarks on the best mode of guarding patients from such dangerous occurrences, in operations about the neck and shoulder.

Mr. B. Cooper remarked that the case would not be complete unless he stated that, since the paper had been written, the disease for which amputation had been performed, had affected the other scapula. He thought, also, that the loss of motion and the altered sensation in the lower extremities, might be dependent on the spine being implicated in the disease.

In reply to a question from Dr. Gregory, Mr. Cooper stated that the explanation of the phenomena exhibited in this case had occurred to him at the moment of the seizure, and subsequent reflection had convinced him of its accuracy. He founded his opinion on the facts observed. The patient bore the operation with heroic firmness, and had thanked him for performing it, when, the moment the pressure was removed, the peculiar gurgling sound alluded to in the paper was heard, the patient fell instantly, and the symptoms described had presented themselves. He considered the cause and effect quite made out.

Dr. Gregory had seen a horse destroyed by opening its jugular vein and blowing air into it, the quantity of air being only the amount received into the chest by one inspiration. The horse dropped down instantly in violent convulsions, and died in about a minute. Had the admission of air into the vein in Mr. Cooper's case been really the cause of the phenomena exhibited, would not the first symptom have been convulsions?

Mr. Dalrymple said, that according to his experience, introduction of air into the veins was far from causing instantaneous death in animals. The fatal event did not occur for three or four minutes, and the mode of dying was precisely the same as if a cord had been tied about the neck of the animal,—insensibility came on first, and then convulsions. He had lately seen an ass killed by blowing air into the jugular vein; a considerable quantity was blown in, and with a good deal of force; the animal shivered, and then fell down and struggled, and it was thought requisite to blow in an additional quantity for humanity's sake, in order to put a period to its sufferings. Death from this cause was strictly death by asphyxia. The air became mixed with the blood in the heart, so as to form a spumous frothy liquid, which would not pass through the capillaries of the lungs, but was found after death filling the pulmonary artery and its branches. He had never seen cerebral symptoms produced, but he could suppose that if some of this frothy blood did pass the lungs it might be injected by the left ventricle to the brain, and being unable to circulate through it might produce hemiplegia, or some such interruption of cerebral function. But as Mr. Cooper's patient had since been found to have an affection of the spinal cord, this might possibly have been the cause of the paralytic symptoms, which would, therefore, be quite independent of the air in the circulation.

Dr. Bucknill observed that he had found from experiment that when air was blown into a vein near the heart instant death occurred; if the vein were more distant the death was more gradual. It had been found that the same quantity of air introduced into the veins gradually, and in small quantities, would not have the same effect as if it were introduced at once into the system.

Mr. B. Cooper said that the suddenness of the death would depend on the quantity of air thrown into the vein, and on the force with which it was thrown. Different quantities of air thrown in, and different force employed, would determine the relative suddenness of the fatal result.

Mr. B. Phillips doubted if, in all the cases recorded of air passing into the veins, the fatal result was really to be ascribed to that cause. Of the forty cases on record, in most death took place instantly; now, if we compared these results with what occurred in experiments on the lower animals, we should find that we were borne out by them in such an opinion, for generally, in these cases, the death was *not* sudden. He had kept a female catheter in the jugular vein of a dog for ten or twelve minutes without

the animal experiencing any great inconvenience.

Mr. B. Cooper: Ah! but did you blow into the vein?

Mr. B. Phillips: No; that was not necessary. We did not blow into the veins in operations. The opinion he had expressed regarding the cases on record was also borne out by the fact, that in many of these cases the operation was performed on parts a long way from the heart. Thus, one was for the removal of a tumour on the face, another was an operation on the breast. In the first there would be no great degree of suction, and in the second the air would get into the system by traversing small veins with valves; yet in both these cases the death was recorded to be quite sudden. He, therefore, should look for another cause of death in these cases. The gurgling noise heard in Mr. Cooper's case was a strong presumption in favour of its having been admitted in that instance; but, if he had not observed this circumstance, would then Mr. Cooper have attributed the symptoms to the introduction of air? He related a case in which it had been found advisable to abstract blood from the jugular vein for phrenitis; a saucer was pressed firmly against the vein, just below the puncture. The saucer was removed, and the patient was dead in a minute. In this case no gurgling sound was heard. It was found that generally, in animals, the death from the admission of air into the veins was not sudden, but in the human subject it was so.

Mr. B. Cooper maintained the opinion he had expressed in the paper, and thought that the remarks of Mr. Phillips did not show its incorrectness. The presence of valves in the vein had nothing to do with the admission of air, and in regard to one of the cases referred to by Mr. Phillips, of sudden death from that cause, he (Mr. Cooper) thought that it was the external jugular vein into which the air had entered. Looking at the condition of a patient immediately after or during an operation, the suppressed respiration, the impeded action of the heart, the closed mouth, the pinched-up nose, all resulting from the influence of terror, he could well believe that when reaction came on, there would be a vacuum on the right side of the heart, which would predispose to the admission of air into the circulation.

Mr. Snow said that the absence of sound in the case just related by Mr. Phillips was no proof that air did not pass into the jugular vein. Air might pass into a vein in large quantity without sound; it would only be in passing out again that it would be sure to make a gurgling sound as it passed through the blood. This observation was applicable to the case related in the paper; the sound heard by Mr. Cooper was most likely during the expiration immediately following the inspiratory effort by which the air had been introduced, and Mr. C. could not be sure that it was only a small quantity of air which entered; it might be, and probably was, so much as the subclavian vein and the superior cava would contain all the way to the heart, and this quantity would pass in during but a small portion of a second, for air moved with very great velocity under a slight alteration of pressure, as was witnessed by the ease and rapidity with which a person could fill his chest through a single nostril.

Mr. Hilton was present at the operation on Mr. Cooper's patient. She was cheerful after the operation; the pressure was removed, and in a moment she fell as if dead. He was not near enough to hear the sound caused by the air entering the vein. He had no doubt in his own mind that the symptoms were referrible to the admission of air into the vein from which the pressure had been removed. It was difficult in these cases to determine the quantity of air admitted. In two experiments which he had seen of killing horses by blowing air into the jugular vein, the results were similar to those observed by Mr. Dalrymple, and different from those described by Dr. Gregory. He (Mr. Hilton) attributed the paralysis, and other symptoms of that description in Mr. Cooper's case, to disease of the spine, without reference to the presence of air in the circulation.

Mr. Erichsen remarked on the necessity of separating those cases in which air was introduced forcibly, as by insufflation, into the veins, from those in which it gained admittance spontaneously into the circulating system. These cases differed not only in the symptoms that occurred, but also in the immediate cause of death. When air was blown into the jugular vein of an animal, death ensued very rapidly, sometimes instantaneously, as if the animal had been struck by lightning, and usually within five minutes. On opening the thorax as soon as animal life had become extinct, the action of the heart would be found to be arrested, the right cavities being enormously distended,—death, in fact, having taken place in consequence of paralysis of the heart from over-distention. When, however, a vein was exposed at the root of a dog's neck, and punctured at a point where the venous pulse is perceptible, the air introduced itself during each inspiration, and death frequently did not occur for half an hour or more. On opening the thorax in these cases as soon as animal life had ceased, the heart would be found acting regularly and vigorously, not being materially distended,—certainly not so much so as in ordinary cases of asphyxia; indeed, it was most generally, as Mr. E. had had frequent occasion to observe, quite soft and supple; for, as the air was gradually introduced, it became beat up with the blood, forming a viscid, reddish froth, which

gradually passed into the branches of the pulmonary artery, blocked up the capillaries of the lungs, and thus arrested the circulation through these organs, the animal dying as if a ligature had been passed round the pulmonary artery. Death, however, did not occur until the capillaries of the lungs were obstructed to such an extent that sufficient blood did not pass through them to afford a due stimulus to the medulla oblongata, and those central parts of the nervous system the proper action of which was necessary for the maintenance of the respiratory movements. In the one case, then, that of the forcible introduction of air into the veins, death began in the heart; in the other, that of its spontaneous admission, it commenced in the lungs. There was another important point to which Mr. Erichsen directed the attention of the society, viz., that air could be introduced spontaneously only during the act of inspiration. When a vein was opened in the dangerous region, air was only admitted during inspiration, when, as Sir David Barry and Dr. Carson had proved, the tendency to a vacuum within and around the heart was occasioned, and it was to fill up this that the air rushed in. The entry of air into a vein could be arrested, or, at all events, to a certain degree prevented, by compressing the chest. For, as the tendency to the production of a vacuum within the thorax, and the consequent liability to the introduction of air into the venous system, was in the direct ratio of the depth and completeness of the inspiratory effort, the most effectual means of preventing this accident during an operation would be to confine the respirations to such a degree as is compatible with the patient's comfort. In this way we might prevent the entry of air at a point at which it would otherwise gain admittance. He would, therefore, advise in all operations about the dangerous region, that a laced napkin should be put about the chest, which might be tightened during the operation. He thought remedial measures, when once the air had entered, of little avail.

Mr. De Morgan had seen a fatal instance of introduction of air into the veins during the treatment of a person poisoned with opium. The patient was in a state of profound coma, and was bled from the jugular vein with very marked benefit; the breathing, which was very slow and difficult and irregular, became more frequent and natural during the operation, but at its close the air was heard to pass into the vein with a rushing sound, and the patient quickly expired. The examination of the body was delayed two or three days on account of an inquest; but, the weather being cold, there was not the slightest decomposition. The right cavities of the heart were distended, and on making an incision there was a rush of air; the pulmonary artery and its branches were filled with air and frothy blood; and small air-bubbles were found in the veins within the skull.

Mr. Fisher had seen this case, and had no doubt that the death resulted from the admission of air into the circulation. The air escaped into the vein as the man was recovering from a state of collapse, and during a deep inspiration.

WESTMINSTER MEDICAL SOCIETY.

Saturday, December 16, 1843.

Mr. Fisher, President.

AIR IN THE VEINS. REVACCINATION.

Dr. Chowne had seen a case which, after an operation for the removal of an ovarian tumour, proved fatal in four or five days, but not from peritoneal inflammation—a portion of the peritoneum which had been divided in the operation had united so completely that no mark whatever of the wound existed.

No member had seen such a case, but Mr. Hancock had found, in dissecting patients who had been operated upon for hernia that no mark existed in that part where the peritoneum had been divided.

Some conversation followed on death from the admission of air into the veins.

Mr. Field, the veterinary surgeon, who happened to be present, remarked, that in animals, in whom air was injected into the jugular vein, the results in no two cases were precisely similar. Some died instantly, some lingered for a long time, some dropped immediately, others struggled before falling. The quantity of air necessary to produce a fatal result was very different. In some cases the breath from the lungs would be sufficient, in others it was necessary to inject air by means of a bellows. The rapidity of the death, he thought, depended on the quantity of air injected, although it would appear, from the difficulty of producing a fatal effect in a horse affected with tetanus, which he had killed by injecting air into the circulation, that the state of the nervous system might have some influence on the rapidity of the action of the air. He related the case of a horse of King Leopold, in which air escaped into the circulation during bleeding, with a gurgling noise; the horse instantly fell, but soon recovered. He had found, in fatal cases, a quantity of frothy blood—air mixed with blood—on the right side of the heart, in cases of suffocation from rupture of a blood-vessel in the air-cells of the lungs. Killing an animal by blowing air into the veins was by no means a humane way of dispatching it.

Dr. Copland attributed the fatal effects of the admission of air into the veins to a chemical change effected in the circulating fluid of those vessels. Oxygen was admitted from the atmosphere, and this, combining with the carbonic oxide of the venous blood,

formed carbonic acid, which acted by destroying the irritability of the heart and lungs,—death, therefore, was caused by an arrest of the circulation, not exactly like asphyxia, but similar to it.

Some conversation ensued respecting vaccination, in which Dr. Copland inquired the experience of members with regard to the protective power of vaccination. Did not this protection become less effectual in a direct ratio from the period when the vaccination was performed? Upwards of twenty years since he had attended nine persons in one family suffering from small-pox after vaccination. The older the person, and, consequently, the longer the period from the vaccination, the more severe the disease, so that the youngest child had it in the most modified form. He expressed his opinion on the subject in a journal he edited at that time, and only got laughed at for what was then considered absurd. Subsequent experience had convinced him that he was right in his opinion.

Mr. Marson, in reply to some questions, stated that the earliest period he had seen small-pox appear in a *severe* form, after vaccination in infancy, was at thirteen years of age, but even this time might be looked upon as an exception to the general rule, and hence he was in the habit of recommending revaccination immediately after puberty, to be repeated when small-pox might be prevalent, or when persons came in the way of the disease accidentally at other times. In vaccinating he produced ordinarily five vesicles with the lymph now in use at the Small-Pox Hospital, and he thought that the greatest care ought to be taken to ensure the production of that number always, more especially in the first vaccination, for on the success of this the safety of the patient would principally depend. He considered that the child ought to be in good health at the time of vaccination, and free, more particularly, from all skin-diseases. That the lymph used should be taken from a vesicle on the day week after insertion, and when it was without areola. That on no account should the lymph be used later than the eighth day; that was, one day beyond the week from insertion.

Mr. Leese considered the eighth or tenth week after birth the best time to vaccinate.

Mr. Fisher had examined ninety thousand men during his connection with the police force. The majority of those from the country had but one vaccine mark. When these men caught small-pox it was usually fatal.

MEDICAL SOCIETY OF LONDON.

Monday, December 18, 1843.

REMOVAL OF OVARIAN TUMOURS.

Dr. Waller, in allusion to the discussion at the last meeting, expressed his opinion in favour of the large abdominal section in operations for the removal of ovarian tumours. He grounded his opinion not only on the statistics of the operation, as performed by the large and small sections, but from personal observation of the former. Looking at the greater ease with which the operator would remove the diseased growth, the impunity with which the peritoneum might, in many cases, be divided, and that any solid growth attached to the ovarium might be removed through a large opening, he was of opinion that the objections raised against this mode of proceeding were not valid. He attributed, however, much of the success in Dr. Clay's and Mr. Walne's cases to the judicious after-treatment, and the maintenance of a proper degree of temperature in the operating-room. He referred to some experiments of Dr. Blundell, performed many years since, with the object of showing that that distinguished physician ought to have the credit of suggesting the operation, which had so lately excited such great attention in the profession.

Mr. Crisp referred to the cases of Mr. Jeaffreson, of Framlingham, and Mr. King, of Saxmundham, both which gentlemen, he thought, were entitled to much praise for their performance of the operation many years since. A namesake of his own, of Harlesden, had also performed the operation successfully.

Dr. Bennett made some remarks with the object of showing that the sedative plan of treatment pursued by Dr. Clay and Mr. Walne after the operation, had been productive of much benefit, and saved the necessity of bleeding.

DISEASED HEART.

Mr. Hutchinson exhibited the heart of a boy, sixteen years of age, in which one of the semilunar valves of the aorta was incrusted with a calcareous deposit: portions of the same matter were also found in the carneæ columnæ. The history of the case was incomplete, in consequence of Mr. Hutchinson having been called in to the patient only a few hours before he died. It appeared, however, that the deceased was a strong, healthy lad, apprentice to a hairdresser,—that ten months since he received, at the Adelaide Gallery, three successive electric shocks,—that he felt at the time a tightness across the chest and a general indisposition for three days. He suffered from a convulsive fit two months since, and since then had been observed to be occasionally both very low-spirited and indisposed to follow his usual employment. On Thursday morning he had a pain in his side, and was taken to Dr. Turnbull, who prescribed tartar-emetic mixture, which produced much vomiting. He died on the next night (Friday). Had the electricity any effect on the production of the disease?

Some discussion followed, in which it was suggested that the disorganisation was the result of carditis.

NAPHTHA IN CONSUMPTION.

Dr. RISDON BENNETT inquired if any member had tried the effect of naphtha in cases of pulmonary consumption. He had used this medicine in six cases of the disease, in various stages, and he had not found the slightest benefit from it whatsoever. He had persevered in the use of the remedy for five or six weeks, beginning with fifteen-drop doses, four times a day, and increasing the dose to twenty-five and thirty drops. Not one case was in the least benefited, and he thought it the duty of the members of the society to give the result of their experience of a medicine at present attracting some attention.

(The next meeting of this society will be on Jan. 15, that of the Westminster on Jan. 6, and the Royal Medical and Chirurgical on the 9th.)

ROYAL MEDICO-BOTANICAL SOCIETY.

Thursday, December 14, 1843.

Dr. COOKE in the chair.

A PAPER was read by Mr. BARHAM on the solanum dulcamara, in which he corrected a prevailing error among botanists, by whom the plant is described as *twining*. Mr. Barham exhibited a large collection of the stems of the solanum, none of which had the slightest pretension to be so described. They were not exceptions, culled for the purpose, but fair examples of the usual character of the part of the plant employed in medicine. He observes that he has long been familiarly acquainted with it, in every variety of soil, from the top of a dry wall to a wet ditch, but has never met with a twining stem; so that he is of opinion, if such should ever have been observed, that it must be viewed as an exception, an accidental deviation from the usual character of the plant. The stem will not unfrequently be found about ten or twelve feet in length, sometimes nearly straight, at others presenting a zig-zag appearance. Should it grow amongst bushes, from the support afforded its growth will be upwards; if amongst grass, the part of the stem in its contact assumes a warty appearance, and eventually becomes radicant.

The Secretary afterwards read a communication by Mr. Hooper, of Pall-Mall, on the essential oils, of the anthemis nobilis, illustrated by very fine specimens. The blue oil was obtained from the flowers, the pale yellow from the herb after the flowers had been gathered. Mr. Hooper observes that the flower from the plant of the first year's cultivation is best adapted for medicinal purposes, and yields the greatest quantity of essential oil and extract. Many persons prefer the wild plant on account of the cultivated variety degenerating after the first year's produce.

Specimens of the leaves of the conium maculatum, dried in 1842, and of the strobules of the hop dried in Sept. last, by spontaneous evaporation, were exhibited by Mr. Hooper to the meeting, as illustrating the great advantages of that process,—the specimens were very fine.

UNIVERSITY OF LONDON.

PASS EXAMINATION for the degree of M.D., November 27, 1843. CELSUS DE RE MEDICA. Examiners, Drs. BILLING and TWEEDIE.

CASE IN MEDICINE.—A married woman, twenty-five years of age, came under observation on the 8th of June, and gave the following account of her illness:—About six months previously she felt pain in the cardiac region, and vertigo, followed by loss of power in the left side of the body, and loss of speech. On the following day she became insensible, and remained so for about a week, but, after the adoption of energetic treatment, recovered her consciousness, and the power of the left side of the face, but the command over the left upper and lower extremity was much impaired. She was in this state when she applied for advice on the 8th of June, and continued without perceptible change for four weeks, when the pain in the cardiac region increased, accompanied with strong impulse of the heart, and a rough rolling murmur with the first sound. The measures pursued had the effect of diminishing the impulse of the heart so much that she unadvisedly went abroad, and afterwards exposed herself to cold. When visited a few days afterwards she exhibited the following symptoms:—The breathing was laborious, the lips were livid; there was, however, so much consciousness that she recognised persons around her, but her articulation was indistinct, and her voice feeble; the pulse became scarcely perceptible, the extremities cold, and she died in the evening.

What was the nature of her disease? What treatment would you have suggested? What appearances would you have expected to find on examination of the body after death?

EXAMINATION FOR HONOURS, 1843; degree of M.D., December 5, 1843. Examiners, Mr. BACOT and Sir STEPHEN HAMMICK.

CASE IN SURGERY.—If called to a person about the middle age, and apparently hitherto in good health, who has been found lying in the street in a state of total insensibility, how would you detect, whether that unconsciousness has arisen from a concussion of the brain; an extravasation of blood within the head, from violence or natural causes; a

fracture of the skull; apoplexy; epilepsy; drunkenness; or poison? Detail the symptoms of each of the above states respectively, and where you think the application of the trephine is necessary, you will give the method of performing that operation; contrasting the practice of the present day, in the treatment of capillary, simple and compound fractures of the skull, with that pursued by Mr. Pott and the best surgeons of his time, with your opinion of the superiority of one over the other.

DR. E. WILLIAMS

ON THE

RESOLUTIONS OF THE COLCHESTER MEDICAL SOCIETY.

"Audi alteram partem."

To the Editor of THE LANCET.

SIR,—I was surprised this morning in observing (LANCET, page 421) a report of proceedings under the head "Colchester Medical Society." Had I been aware that any person was *authorised* by such society to *publish its Transactions*, I should certainly have supplied you, by way of appendix, with a few lines explanatory of the affair. The "charges" were brought forward at an ordinary meeting, and without my receiving the slightest intimation of any such intention; in consequence of my absence a general special meeting was convened.

I deem it but right that you should be possessed of the grounds on which the charges were "*proven*," leaving open the consideration of their being considered "unprofessional."

First. For "contracting with patients for annual attendance and payment."

To substantiate this, a solitary instance was produced whereon to ground so *flagrant a breach* of professional bearing. After nearly seven years' practice in this town and neighbourhood, an isolated case, an exception to a general rule, is trumpeted forth as an unheard-of departure from professional usage. Were I satisfied that no case can occur in which such arrangement may be desirable, without compromising the character of a physician, I should not adopt even an exception to a general rule. But I have yet to learn that it *is* a departure from usage! Is it an unheard-of circumstance for a physician to attend households by the year? Does not the law recognise a physician's contract for medical attendance? Is not the principle of annual attendance established in infirmaries, lunatic asylums, and by the Poor-law Amendment Act?

Secondly. The charge of contracting with a druggist was advanced! On what ground? *Because* I confined my gratuitous prescriptions to be dispensed by one individual. My reasons for so doing will be seen by the inclosed note from the aforesaid gentleman. From such note I leave it to your editorial sagacity to determine whether such charge was "proven."*

Thirdly. This charge is highly characteristic of the animus evinced in this contemptible proceeding. More than two years ago I wished to try a preparation of iron from a formula in a German Pharmacopœia. I requested the chemist to prepare it. It may have been ordered in some half-dozen prescriptions,—certainly I have not within the last *two years* prescribed it; and this is construed into *making secret remedies!*

Fourthly. In reply to my having taken a fee from an out-patient, the case stands thus:—I was requested to visit a person residing a mile and a half, nearly, out of Colchester, by the patient's wife, who came to *my house*. I accordingly visited, and received the usual honorarium, viz., half a sovereign. My visit was not made in the capacity of hospital physician, inasmuch as it is contrary to the usage of the staff to visit out-patients.

Such is a plain statement of the facts connected with the charges.

Now for the resolution. There were present at the "general special meeting" twelve persons, of which four were opposed or neutral (only *one* dissentient in the report); one of the remaining eight possesses no qualification to practise; another is but half qualified, not being a licentiate, and yet holding *two union-houses*. If we deduct those *gentlemen* engaged in presenting the charges, the support of the "one dissentient" is, after all, not so despicable. On the contrary, Mr. Editor, I esteem the opinion of that dissentient, who acted impartially and unbiassed, more than I heed the petty malevolence of a host of such peevish, ill-conditioned gentry. I beg to remain, Sir, yours faithfully,

E. WILLIAMS.

Colchester, Dec. 23, 1843.

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* "Church-street, Dec. 2, 1843.

"Dear Sir,—In reply to your note relative to your gratuitous prescriptions, which I was in the habit of dispensing, the following were the reasons you stated at the time I took them for confining your prescriptions to one druggist:—First. With a view of preventing any improper use of them by transfer from one poor person to another. Secondly. In order that they should be dispensed with proper medicines at a uniform and moderate rate. And, thirdly, that you should have full liberty to examine the drugs, and ascertain that the scale of prices agreed upon was adhered to. These conditions being fulfilled on my part, constitute, I conclude, the 'contract' you allude to, for beyond this verbal understanding no contract has existed between us. I remain, dear Sir, faithfully yours,

"A. THO. EDWARDS"

DR. RIGBY'S EDITION OF WILLIAM HUNTER.

To the Editor of THE LANCET.

SIR,—Although not particularly complimentary in tone, I cannot but thank —— (THE LANCET, Dr. Rigby should have said. —ED. L.) for pointing out last week the eight errata which the reviewer has discovered in my edition of Dr. Hunter's "Anatomical Description of the Human Gravid Uterus and its Contents," and which I regret had escaped my notice. I have requested the publisher to insert a printed list of them into the unsold copies.

On the whole, I may congratulate myself that the errata are so few, and, what is of more importance, so immaterial, otherwise the reviewer's anxiety in my behalf would not have permitted him to overlook them. As it is, he actually misquotes the original in the very first erratum which he points out, omitting the word *accurate*, intentionally, doubtless (and very appropriately), for the purpose of demonstrating, at his own expense, how difficult it is to avoid such blunders and oversights. Indeed, I may say that the second edition is *more* correct than the original, as is seen at page 62, where I have pointed out a transposition of the words *head* and *trunk*, which had entirely confused the meaning of the sentence. With regard to errors in punctuation to which he alludes, I believe I may rest equally satisfied.

In not adding an "account of the various discoveries which have been made in the anatomy and physiology of the gravid uterus during the last fifty years" (which would have converted the book into a bulky and expensive volume), I was entirely guided by the opinion and advice of one who is acknowledged by all to hold first rank among the scientific anatomists and physiologists of this country, and who carefully perused and approved the few notes which I have added. The reviewer declares that I am "not an anatomist," an assertion which, in his peculiar meaning of the word, is, perhaps, correct, as I willingly confess that I have not had such extensive opportunities of cultivating the *particular* branch of anatomy to which he alludes. He complains that my notes "are almost entirely mere compilations from Baer, Montgomery, Carpenter, Sharpey, &c.;" but there is one distinguished name which he has (rather unjustly, I think) omitted to mention, and to which, I trust, I have done justice, viz., that of Dr. Robert Lee.

With regard to his last charge, viz., of ignorance respecting the relation between the ovum and the vesicula umbilicalis, I think that a little calm reflection, and, perchance, a little study also of "Baer, Montgomery, Carpenter, Sharpey, &c.," will tell him that this recoils upon himself, and in no wise touches your obedient servant,

ED. RIGBY.

New-street, Spring-gardens,
Dec. 26, 1843.

*** Dr. Rigby is correct in saying that the word *accurate* was omitted from our quotation. The omission was accidental, and we regret its occurrence. In order, however, to make quite plain the variations of Dr. Rigby from the text, in the passage cited, we print, below, the original by Dr. Baillie, and the version of Dr. Rigby, in juxta-position. Our own misquotation was accidental, but the misprints in Dr. Rigby's edition look exactly as if they had been indulged in under an impression that the reviewers in the medical journals would not look very sharply into the purity of the "new edition." We intend to return to the topic of the gravid uterus in an early number. It involves at least one question in the department of anatomy which *shall be set at rest*. All this, however, in good temper with Dr. Rigby, who has addressed to us a very good-tempered note :—

Dr. Baillie's Text.

"An accurate *anatomical* description of the human gravid uterus and its contents has not *hitherto* been published in this, nor I believe in any other country. It was, therefore, a desideratum in anatomy, and no person surely was so capable of supplying this want as the late Dr. Hunter."

Dr. Rigby's Version.

"An *accurate description* of the human gravid uterus and its contents has not been published in this, nor I believe in any other country. It was *hitherto*, therefore, a desideratum in anatomy, and no person, surely, was so capable of supplying this want as the late Dr. Hunter."

SEAT OF TUBERCLES IN PHTHISIS.—In M. Louis' experience, out of 80 cases of pulmonary tubercle, the cervical glands also were found the seat of tuberculous matter in 8 instances; out of 102 cases, the mesenteric glands were tuberculous in 23 instances; the meso-cæcal and meso-colic glands were similarly affected a little less frequently than the mesenteric; and out of 60 cases, the lumbar glands were found tuberculous in 5 instances. Attention is naturally excited to the eminent frequency of tubercle in the lacteal glands, and some authors have asserted that they are the original seat of tubercles in consumption. M. Louis states, however, that all his experience has gone to confirm that after the age of fifteen, tuberculous matter never presents itself in any tissue or organ unless it exist also in the lungs.—*British and Foreign Medical Review.*

TAKING CHARGE OF OTHER SURGEONS' PATIENTS.

To the Editor of THE LANCET.

SIR,—A short time ago I was attending a person in a village near this place, who was labouring under an attack of inflammation. I visited him on Wednesday, and on Thursday he was seen by my assistant; on Friday it was requested that I would see him, which I was unable to do, in consequence of the illness of a beloved child, who died early on the following morning. When my assistant called on the Saturday morning he was informed by my patient that Mr. W., of Atherstone, happening to be in the village on the preceding evening, had been asked "to step in." He told the man that he ought to be bled again immediately, but refused to do it "unless the case was put entirely into his hands." It being represented to my patient that unless he were bled immediately he could not live an hour, he thought it safest to act as directed, being terribly frightened at the intelligence. I shall feel obliged by your opinion, how far you think such conduct consistent with that of a "gentleman" who styles himself a member of an honourable profession. Authenticating my statement, privately, by handing you on the other side my name and address, I am, Sir, your obedient servant,

M. D.

December 20, 1843.

*** The proceeding described is not defensible. If Mr. W. believed what he announced, he should at once have called on, or sent a messenger to, M.D., warning him of the alleged condition of the patient.

NEWS OF THE WEEK.

THE diminution of the mortality in the metropolis continued from the previous week through that ending Dec. 16th, the deaths registered in which amounted to 967, or 20 less than those in the week before, though still 59 above the weekly average of deaths during the five past autumns. Deaths from diseases of the brain and nervous system, 159 (*vice* 141 in the week before); ditto of the lungs, &c., 300 (*v.* 375); of the heart, &c., 21 (*v.* 30); of the digestive organs, 58 (*v.* 66); of diseases of uncertain seat, 112 (*v.* 80); and from natural decay, 71 (*v.* 68). *Registered* deaths from epidemic diseases had increased from 182 (week previous) to 194, of which 29 were from typhus, 11 from croup, 46 from scarlatina, and 10 from small-pox; deaths from measles 38, and from hooping-cough 41, being an augmentation over those in the week preceding.

ON Thursday last Dr. SETH THOMPSON was elected to fill the vacancy at the Middlesex Hospital, by a majority of 126 over his opponent, the numbers being—for Dr. THOMPSON, 368 votes; Dr. WOODFALL, 242.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

LIST of gentlemen admitted members on Friday, Dec. 22, 1843:—J. Burt, P. T. Gunning, W. A. Anderson, R. K. Dunn, A. Wade, N. Ward, M. Anthony, N. S. Smith, M. Balfe, J. Horton, V. Edwards, T. Fleming, J. S. Knight, E. M. Foster, S. H. Swayne, C. H. Fasson, E. P. Phillips, D. Evans, G. Cleveland.

APOTHECARIES' HALL, LONDON.

NAMES of gentlemen who received certificates of qualification to practise as apothecaries on Thursday, Dec. 21, 1843:—Alfred Parr, Liverpool; Spencer Pratt, East India Company's service; Jenkin Homfray Llewelyn; Samuel Nathaniel Elliot; James Edward Hebblethwaite, Oporto.

CORRESPONDENTS.

An Observer, who recommends the appointment of medical inspectors of markets, to look after the bad meat, should address his general views on the subject to a daily newspaper, and follow them up by accumulations of facts or arguments, for we cannot ourselves advocate the appointment of inspectors from amongst the members of the medical profession. The office might be open to competition, but it is hardly possible that any of the profession would become candidates for the place; we certainly should not consider our "order" by any means ennobled by the fact. We agree with our correspondent that the food markets of all kinds greatly need efficient superintendence.

As we hate everything like ambiguity in accusation, we think it is due to *Mr. Robertson* to acquaint him, at once, that our allusion to his interference in "business that was not his own" referred to statements which he is said to have made with respect to this Journal, of a very incorrect description. This information was furnished to us by a person of respectability, but we deemed it, at the time, to be unworthy of further notice.

The communications of *Mr. W. W. Morgan* and *Dr. W. P. Brookes* next week.

The letters of *Mr. Wm. Ryan* (Sutton Coldfield), *M. D.* (relating to the late Mr. Rees), *Studens Eboracensis*, *Antispiral*, *Mr. M. D. Thompson*, *Rusticus*, *T. in U.*, *Medicus*, and many other correspondents, came too late, or were too numerous, for insertion or further notice this week.

We have never heard of such an offer as that mentioned by *Physico-Medicus*.